

vpacad@sfu.ca www.sfu.ca/vpacademic TEL: 778.782.3925 FAX: 778.782.5876

> 8888 University Drive Burnaby, BC Canada V5A 1S6

**MEMORANDUM** 

ATTENTION Senate DATE November 17, 2022

FROM Jeff Derksen, Dean of Graduate and Post-PAGES 1/1

Doctoral Studies and Associate-Provost, and Acting Chair, SCUP on behalf of Wade Parkhouse, Provost and Vice-President

Academic

RE: SCUP 22-23 Establishment of the Pacific Institute on Pathogens, Pandemics and Society

(PIPPS)

At its meeting on November 16, 2022, SCUP reviewed and approved the establishment of the Pacific Institute on Pathogens, Pandemics and Society (PIPPS) for a five-year term.

**Motion:** That Senate approve the establishment of the Pacific Institute on Pathogens, Pandemics and Society (PIPPS) as an Institute for a five-year term.

C: M. Richards, C. Coljin, K. Lee, V. Farrally



#### Memorandum

From: Michael Richards, Associate Vice-President, Research Date: Nov 02, 2022

Re: Pacific Institute on Pathogens, Pandemics and Society (PIPPS)

To: Wade Parkhouse, Chair, *Ex-officio*, Senate Committee on University Planning (SCUP)

Attached is a proposal for the establishment of the Pacific Institute on Pathogens, Pandemics and Society (PIPPS). The proposal is led by the inaugural Directors of the Institute, Drs. Caroline Coljin, Professor and Canada 150 Research Chair, Department of Mathematics, and Dr. Kelley Lee, Professor and Tier 1 CRC Chair, Faculty of Health Sciences.

As a 'collaborative institution', PIPPS is an interdisciplinary Institute that works closely with other research institutes and organizations, all levels of government and the Public. PIPPS' unique collaborative model informs and supports the development of a 'whole of society' and planetary response to understanding the emergence and spread of pathogens and major infectious disease events and strengthen the capacity to 'prevent, prepare, respond, and recover', which is consistent with the United Nations' 2030 Agenda for Sustainable Development and recognition of a changing planet. PIPPS will support the provincial government to build core population health capacities that provide added value to BC's existing academic health complex through new research, training, and educational opportunities. It will generate and mobilize knowledge to optimize evidence-informed decision-making that strengthens prevention preparedness, response and recovery by individuals and communities throughout BC.

Prior to this application, PIPPS members have collaborated on a wide range of projects. Dr. Lee and Dr. Julia Smith (PIPPS Health and Social Inequities Theme Lead) are longstanding collaborators on projects related to tobacco control and global health governance. During the covid-19 pandemic, each established and is leading major new projects (the pandemics and borders project and gender and covid-19 project) with substantial new grant funding. In addition, each contribute to the project of the other. Both projects will be brought under the umbrella of the new institute.

PIPPS will be governed by an Advisory Board comprised of members representing not only Simon Fraser University but, given its intention to develop as a 'collaborative institution', representation also has been sought from other research-intensive universities in BC, the Office of the Provincial Health Officer, and the BC Indigenous research community. The SFU Vice-President Research and International (VPRI) (Dr. Dugan O'Neil) will chair the Advisory Board. The level of collaboration across fields as different as mathematics and social sciences reflects a highly modern perspective and opens PIPPS to many funding opportunities that a strictly discipline-based approach would not.

I recommend approval as a Research Institute according to Policy R40.01.

#### **Motion:**

That SCUP approve the establishment of the Pacific Institute on Pathogens, Pandemics and Society (PIPPS) as an institute for a five-year term.

#### Attachments:

- PIPPS Research Institute application
- Letter of support from the Dean of Faculty of Science
- Letter of support from the Dean of Faculty of Health Sciences

Strong support for PIPPS was received from BC's five regional health authorities and First Nations Health Authority during a recent consultation process.

M



# FACULTY OF SCIENCE DEAN OF SCIENCE

Technology and Science Complex-II 9900 8888 University Drive Burnaby BC Canada V5A 1S6

TEL + 1 778 782 4590 FAX + 1 778 782 3424 SFU.CA/SCIENCE

November 1, 2022

Dear Members, Senate Committee on University Priorities (SCUP):

# RE: LETTER OF SUPPORT, PIPPS

I am writing to express my enthusiastic support of the Pacific Institute on Pathogens, Pandemics, and Society's (PIPPS) application to be formally recognized as an SFU Institute. PIPPS will raise the SFU's national and international profile in the area of infectious disease, pandemic prevention, response, and resilience. It will bring a new level of engagement between SFU and policy makers in public health. It has a unique combination of expertise that is usually siloed – modelling, evolution, data science, social science, and communications. An SFU Institute, PIPPS will enable researchers who work in these critically important disciplines to collaborate to the best effect, and to build a leading presence in a unique and important area.

PIPPS has two scientific co-directors: Dr. Caroline Colijn, Professor and Canada 150 Research Chair, Department of Mathematics, and Dr. Kelley Lee, Professor and Tier 1 CRC Chair, Faculty of Health Sciences. This joint leadership of the new Institute reflects its interdisciplinary focus, bringing the best of the quantitative and qualitive worlds together to focus on common problems associated with understanding emerging pathogens and preventing and mitigating outbreaks and future pandemics.

As the world slowly emerges from the ongoing COVID -19 pandemic, it has become abundantly clear that not only were we not sufficiently prepared for the pandemic, but there were also vast differences in the capacity to respond and the effectiveness of responses from country to country and even region to region within countries. Although the reasons vary widely, a common issue was lack of an integrated approach across sectors and disciplines.

The establishment of PIPPS addresses this challenge by bringing together multiple disciplines, clearly illustrated by its leadership and initial membership. This multidisciplinary approach will assist SFU to become a global leader in this field, building on the existing strengths and track records of Dr. Colijn and Dr. Lee.

Dr. Colijn is a key figure in BC's pandemic response. She has developed many pandemic models and scenarios, sharing this work with the BC Government, the Public Health Agency of Canada, the National Committee on Immunization and other policy makers. She has played a key role in, and co-founded, the BC COVID-19 Modelling group, and was consulted frequently and extensively by the media throughout the pandemic. It is no surprise to me that she received an SFU Newsmaker award and a Radio-Canada Scientist of the Year Prize. SFU's Faculty of Science gave her our 2021 Excellence in Science Public Engagement and Outreach Award. Dr. Colijn has an excellent track record of interdisciplinary research spanning public health, infectious disease, evolution, and mathematics.

PIPPS research leaders include two additional Faculty of Science researchers: Dr. Ben Ashby and Dr. Jessica Stockdale. Dr. Ashby recently received a \$202,000 NSERC discovery grant to study microbial evolution along the parasitism-mutualism continuum. Dr. Stockdale is one of our newest faculty members, and will be working on establishing the data

science that is needed for infectious diseases that pose a substantial population-level threat. This field continues to grow in importance and scope, as climate change and other forces contribute to the risk of future pandemics and infectious diseases with the potential to cause high consequences for human populations by leading to new infections, antibiotic-resistant forms of bacterial infection, new variants of SARS-CoV-2, new influenzas, and more.

Dr. Colijn and Dr. Lee have assembled an excellent team of scientists spanning more than one Faculty, whose complementary skills and knowledge will contribute greatly to developing strategies for how British Columbia, Canada, and the world can respond to the next pandemic or emerging infectious disease crisis. The work of PIPPS will put SFU in a position to inspire multi-sectoral approaches, to work with policy-makers to have impact, and to develop a unique platform for research and training on pathogens, pandemics, and society.

I provide my strongest support for making the Pacific Institute on Pathogens, Pandemics, and Society an SFU Institute.

Sincerely,

Angela Brooks-Wilson Dean, Faculty of Science Simon Fraser University

ABW/el





Simon Fraser University Blusson Hall 8888 University Drive Burnaby BC Canada V5A 1S6

November 1, 2022

# Re: Letter in Support of the Pacific Institute on Pathogens, Pandemics, and Society (PIPPS).

To whom it may concern:

This letter is to express my strong support for the formal establishment of the Pacific Institute on Pathogens, Pandemics and Society (PIPPS) as an institute of Simon Fraser University.

The inaugural Scientific Co-Directors of PIPPS are Professor Kelley Lee, a Tier 1 Canada Research Chair and distinguished member of the Faculty of Health Sciences, and Professor Caroline Colijn, an internationally recognized Canada 150 Chair in the Department of Mathematics, Faculty of Science, as the inaugural Scientific Co-Directors. This co-leadership model reflects the priority commitment given to interdisciplinarity of the new Institute as a starting point. By bringing together a wide range of academic disciplines and perspectives, PIPPS will serve as an innovative research and training platform to champion a full society approach to infectious disease that have potentially significant impacts on the health and well-being of populations and societies. Its vision and mission aligns closely with the interdisciplinary "cell to society" perspective of FHS, and the challenge areas and crosscutting themes that define the Faculty's strategic plan.

Importantly, FHS faculty and researchers has been foundational to the establishment of PIPPS. Professor Lee leads the *Pandemics and Borders Project* (funded by the New Frontiers in Research Fund, Canadian Institutes of Health Research) which is now housed under the PIPPS umbrella. Dr. Julia Smith, who leads the *Gender and COVID-19 Project*, has assumed the role of heading the Health and Social Inequities Theme. Dr. Kiffer Card, notable for his work on public health epidemiology and health services research, leads the development of PIPPS rapid response analytical services. Both are supported by prestigious salary awards from Michael Smith Health Research BC. Dr. Anne-Marie Nicol, who has applied her expertise on health and risk communication throughout the COVID-19 pandemic within the BCCDC, leads knowledge translation activities within PIPPS. Dr. Kaylee Byers, with expertise spanning in animal and human health, has been appointed as a University Research Associate to lead the Institute's work on One Health.

In addition, many FHS trainees are already based within or engaged in PIPPS projects including postdoctoral fellows, PhD students and MSc students. The number of trainees will substantially increase alongside engagement of graduate and undergraduate students in FHS and across SFU in specific projects and training activities.

As Dean of this Faculty, I have been pleased to work with Professor Lee and others on the initial funding and development of PIPPS. I have advised on initial academic appointments and strategic planning, and to provide guidance on PIPPS' engagement with key external stakeholders and partners.

For the above reasons, I write this letter to express my strong support for PIPPS to be formally recognized as an SFU Institute.

Sincerely,

Tania Bubela, BSc (Hons), PhD, JD, FCAHS, FRSC

Professor and Dean

T= MM



# SFU RESEARCH INSTITUTE APPLICATION

#### NAME OF INSTITUTE:

# **Pacific Institute on Pathogens, Pandemics and Society (PIPPS)**

#### **DESCRIPTION OF PROPOSED INSTITUTE:**

Please include a statement of the Research Institute's special purpose and how its work aligns with University priorities and the VPRI Strategic Research Plan.

The Pacific Institute on Pathogens, Pandemics and Society (PIPPS) is concerned with major infectious disease risks and events that have the potential to cause large-scale disruption to health and well-being. PIPPS begins with the recognition that events like the COVID-19 pandemic are public health emergencies with broad societal effects and that place sudden, urgent, and heavy demands on health care and other public services. Accordingly, the Institute focuses on identifying and understanding the potential for the emergence and spread of pathogens and the broad impacts of major disease outbreaks and pandemics on population and public health.

#### Vision

A full society approach to collectively address major infectious disease events with wideranging consequences

#### Mission

To become a world-leading collaborative institute that:

- Generates and mobilizes interdisciplinary knowledge that matters
- Champions multi-sector approaches to infectious disease
- Strengthens the bridge between research and policy

Achieving PIPPS Vision and Mission requires an interdisciplinary lens. Accordingly, PIPPS is an 'interdisciplinary institute,' bringing diverse disciplines together to explore common problems and strengthen their working interface. As a 'collaborative institution,' PIPPS also works closely with other research institutes and organizations, all levels of government, and the public.

These important strategic foundations align with the expectations set out in SFU's Strategic Research Plan: supporting and strengthening participation, cooperation, empowerment and knowledge translation that will lift up and strengthen the capacity of SFU's researchers and students to engage respectfully and ethically with community members.

PIPPS's focus on developing a whole of society and planetary response is consistent with the United Nations' 2030 Agenda for Sustainable Development and the recognition of a changing planet. As recently suggested in a Lancet Planetary Health Viewpoint (Nov 2021), COVID-19 has disrupted and transformed the world. However, the transformations catalyzed by this

pandemic should be used to improve human and planetary health and well-being. This paradigm shift requires decision-makers and policymakers to go beyond building back better, by nesting the economic domain of sustainable development within social and environmental domains.

The Lancet concludes that recovery and transition from the COVID-19 pandemic, which delivers the future humanity want and needs, requires more than a technical understanding of the transformation at hand. It also requires commitment and courage from leaders and policymakers to challenge dominant constructs and to work towards a truly thriving, equitable, and sustainable future to create a world where economic development is not an end goal itself, but a means to secure the health and wellbeing of people and the planet. This precisely, is the interconnected and interdisciplinary work that PIPPS is focused on.

#### RATIONALE FOR ESTABLISHING THE INSTITUTE:

Please include statements on the added value to the research collaborative and to the University in receiving this designation, as well as any potential societal impact (beyond what would be accomplished by individual faculty members).

PIPPS's unique interdisciplinary faculty and collaborative model informs and supports the development of a 'whole of society' multi-sectoral response to understanding the emergence and spread of pathogens and major infectious disease events and strengthen global capacity to 'prevent, prepare, respond, and recover.' PIPPS research will support all levels of government to build core population health capacities. Provincially, the Institute will offer added value to the existing academic health complex through its new research, training, and educational opportunities. It will generate and mobilize knowledge to optimize evidence-informed decision-making that strengthens prevention preparedness, response and recovery by individuals and communities throughout BC.

PRIOR TO APPLYING FOR RESEARCH INSTITUTE STATUS, MEMBERS OF RESEARCH INSTITUTES SHOULD NORMALLY HAVE A HISTORY OF COLLABORATIVE ACTIVITY AS A GROUP.

 $e.g.\ co-supervision\ of\ students,\ co-publications,\ or\ shared\ research\ data,funding,\ and/or\ projects.$ 

Prior to this application, PIPPS members have collaborated on a wide range of projects. Dr. Lee and Dr. Julia Smith (PIPPS Health and Social Inequities Theme Lead) are longstanding collaborators on projects related to tobacco control and global health governance. During the COVID-19 pandemic, each established and is leading major new projects (the Pandemics and Borders project and Gender and COVID-19 project) with substantial new grant funding. In addition, each contributes to the project of the other. Both projects will be brought under the umbrella of the new institute.

Dr. Colijn, Dr. Anne-Marie Nicol (PIPPS Knowledge Translation Lead) and Dr. Jessica Stockdale (PIPPS Analytics and Data Science Theme Lead) also are collaborating with Dr. Lee on the Pandemics and Borders project.

IF THE OBJECTIVES OF THE PROPOSED INSTITUTE OVERLAP WITH AN EXISTING RESEARCH CENTRE OR INSTITUTE, PLEASE PROVIDE EVIDENCE OF CONSULTATION WHERE A POTENTIAL CONFLICT HAS BEEN IDENTIFIED.

PIPPS is a unique organization that does not duplicate existing research centers or institutes. PROPOSED DIRECTOR(S):

#### Caroline Colijn, Department of Mathematics, Faculty of Science

Caroline Colijn is Professor and Canada 150 Research Chair in Mathematics for Infection, Evolution, and Public Health in the Department of Mathematics, at Simon Fraser University (SFU). She has broad interests in applications of mathematics to questions in evolution and public health and was a founding member of the Centre for the Mathematics of Precision Healthcare at Imperial College London. Her research in modelling during the COVID-19 pandemic has been widely recognized. She currently holds grants worth >CDN\$3 million and has been funded by major research councils and governments. She has authored/co-authored 90+ publications and leads the Mathematics, Genomics and Prediction in Infection and Evolution (MAGPIE) research group.

## Kelley Lee, Faculty of Health Sciences

Kelley Lee is Professor and Tier 1 Canada Research Chair in Global Health Governance in the Faculty of Health Sciences, at Simon Fraser University (SFU). Her research focuses on strengthening collective action to mediate the population health impacts of globalization. She was the former head of the WHO Collaborating Centre on Global Change and Health and chaired the WHO Resource Group on Globalization, Trade and Health. She has received >CDN\$21 million over a 30-year career, leading major projects on global infectious disease governance, globalization and health, tobacco control, and health diplomacy. She has authored/co-authored 200+ publications, and currently leads the Pandemics and Borders Project.

#### Current PIPPS faculty membership:

PIPPS Faculty Members & Affiliates	Home Departments and Faculties
Dr. Ben Ashby	Department of Mathematics
Dr. Kaylee Byers	Faculty of Health Sciences
Dr. Kiffer Card	Faculty of Health Sciences
Dr. Caroline Colijn	Department of Mathematics
Dr. Will Hsiao (Affiliate)	Faculty of Health Sciences
Dr. Kelley Lee	Faculty of Health Sciences

Dr. Anne Marie Nicol	Faculty of Health Sciences
Dr. Sandy Rutherford	Department of Mathematics
Dr. Jessica Stockdale	Department of Mathematics
Dr. Julia Smith	Faculty of Health Sciences
Dr. Eric Werker (Affiliate)	Beedie School of Business

Additional PIPPS members are being recruited as the Research Themes and Platforms continue to be developed and additional Research Themes identified. Discussions currently are underway with several individuals in the Faculties of Science, Health Sciences, and Applied Science.

In addition, the Affiliates Program, further detailed below, will invite applications from academic faculty and research scientists affiliated with other academic institutions to become a formal Affiliate of the Institute. As noted below, the addition of Affiliates will build interdisciplinary and intersectoral connections and collaborations and catalyze existing SFU expertise.

#### INTERNAL GOVERNING PROCESS:

PIPPS will be governed by an Advisory Board comprised of members representing not only Simon Fraser University but, given its aim to evolve as a 'collaborative institution', representation from other research-intensive universities across BC, the Office of the Provincial Health Officer, and the BC Indigenous research community. The SFU Vice-President Research and International (VPRI) (Dr. Dugan O'Neil) will chair the Advisory Board.

The role of the Board includes provision of strategic oversight, including guidance in establishing strategic directions and plans and considering major strategic level changes. Draft terms of reference have been developed for review and approval by the inaugural Board.

#### ADVISORY BOARD MEMBERSHIP:

Name	Position	Department	Faculty	Institution
Dr. Dugan O'Neil (Chair)	Vice-President		Research and International	SFU
Dr. Tania Bubela	Dean		Faculty Health Sciences	SFU
Dr. Angie Brooks- Wilson	Dean		Faculty of Science	
Dr. Lisa Kalynchu	Vice President		Research and Innovation	UVIC
TBD				Northern or Interior

Dr. Rob McMaster	Vice Dean	Research	Medicine	UBC
Dr. Margo Greenwood	Scientific Director	Institute of Indigenous Peoples' Health		CIHR
Office of the Provincial Health Officer (3) TBA				

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#### **ORGANIZATION STRUCTURE:**

Three core functions serve as the PIPPS organizing framework: 1) Research, 2) Learning and Teaching, and 3) Convening.

1. The RESEARCH CORE FUNCTION involves activities usually associated with a research institute. Excellence in research is PIPPS' flagship activity and represents its largest investment. The Research Core Function currently includes three Research Themes, although additional themes may be added in future based on observed gaps and consultation (examples proposed to date include Rural and Remote Populations, Behavioral Health, and Prevention). Each Theme has a Lead who has the responsibility for the overall Theme strategic direction, recruitment of faculty, and facilitation of members' participation in wider PIPPS functions and activities.

The current three Research Themes are as follows:

- 1) Health and Social Inequities
- The Health and Social Inequities Theme focuses on identifying and understanding the disproportionate impact of social and economic inequities across population groups within the context of pandemic preparedness and response and which lead to disproportionate effects.
- It explores such impacts and outcomes across sex, gender, race, ethnicity, age, ability, etc., and seeks to understand the relationships between the social determinants of health and pandemics; analyze how public health and social measures interact with social determinants to mitigate or exacerbate inequities and understand inequitable impacts of public health emergencies.
- The Health and Social Inequities Theme draws upon expertise in policy analysis, sociology, anthropology, and methods of qualitative analysis.
- 2) Emerging and Evolving Pathogens
- The Emerging and Evolving Pathogens Theme focuses on identifying the emergence of pathogens, the dynamics of their geographic dispersion and subsequent transmission, and the changing patterns of selection that influence their continued emergence and evolution.
- The Theme draws upon expertise in infectious disease epidemiology and surveillance, respiratory viruses, zoonotics, evolutionary biology, and data and modelling.
- 3) Analytics and Data Science
- The Analytics and Data Science Theme focuses on the estimation of key infectious disease parameters, including providing estimates and analytics in real-time as a pathogen or

pandemic emerges.

- It supports the development of new and improved statistical methods and the "data science of emerging pathogens and pandemics" for application in BC and elsewhere.
- The Theme draws upon expertise in biostatistics, modelling, and methods of quantitative analysis.

Recognizing that research must be shared to have value, PIPPS also is invested in two additional Core Functions that are aimed at supporting researchers, the public sector, and society's access to and understanding of research.

- 2. The LEARNING AND TEACHING CORE FUNCTION is focused on strengthening and supporting provincial research and researcher capacity, across SFU and with other BC research institutions and organizations as well as across the public health sector. Its three major activity streams are as follows:
- 1) Share specialized research knowledge
- Teaching undergraduate and graduate students, postdoctoral fellows and other trainees
- Creating and offering new specialized courses and other learning opportunities, both online and in person and accredited and non-accredited (e.g. MOOC, webinars, workshops, short courses, etc.)
- 2) Sponsor fellowships & internships
- Supporting additional postgraduates, fellows, and intern positions, including in collaboration with other academic institutions and research organizations
- 3) Develop research connections
- Working with other academic institutions to jointly develop and offer specialized courses, providing added value to existing post graduate programs (e.g., UBC School of Population and Public Health graduate programs)
- Engaging and embedding researchers and trainees at SFU and other academic institutions
- 3. The CONVENING CORE FUNCTION involves concrete actions to reduce the gap between policy and practice, improve and facilitate knowledge mobilization within and between the academic and public health sectors, and strengthen the public's understanding of how the science of pathogens and pandemics can help individuals, population groups and communities to increase their resiliency in the face of future outbreaks and pandemics. Its four major activity streams are as follows:
- 1) Support Evidence to Policy and Practice
- PIPPS supports public health sector decision-makers by conducting or commissioning:
  - Summaries of existing research findings, including rapid, systematic, scoping and literature reviews, evidence maps, meta-analyses, etc.
  - Smaller-scale and shorter-term research projects, through internal or open competition funding calls.

- 2) Embed Collaborative Research
- Working with BC health authorities and other organizations, PIPPS scientists develop embedded multi-expertise research teams to strengthen researcher capacity, bring focus to high-priority public health issues, expand health authority access to advanced analytical supports, and enhance and enrich the research-practice continuum.
- Establishing opportunities for Research Affiliates to expand the capacity and reach of PIPPS and share knowledge and expertise
- 3) Strengthen Public Health Sector Capacity
- Working with a variety of partners and stakeholders, PIPPS supports science-based knowledge dissemination activities, such as workshops, conferences, and short courses, to strengthen the public health sector. A specific focus will be on the needs of health authorities, non-profit service providers, and other relevant provincial and community organizations.
- PIPPS supports initiatives to enable researchers, policymakers and practitioners to jointly observe and participate in exchange activities with the aim of better understanding other domains, increasing joint knowledge creation and producing shared outputs.
- 4) Enhance Public Understanding and Awareness
- PIPPS works to strengthen individual and societal resilience by supporting the development of science-based strategies to increase public knowledge and understanding of emerging pathogens and major infectious disease events, their impacts and appropriate public health responses.
- PIPPS helps to customize strategies to meet the unique needs of at-risk populations differentially affected by age, sex and gender, race and ethnicity, socioeconomic status, or other social stratifications.
- PIPPS provides programs for the public health sector and the public, including journalists, community influencers, and other non-health sector decision-makers, to demystify research and broaden non-researchers' understanding of its importance and appropriate use in the public domain.

In addition to the three Core Functions, PIPPS also includes two Platforms, each with a dedicated Lead. The Platforms are intended to provide support across the Research Themes and help link and interface PIPPS with other academic institutions, all levels of government, and the public.

The RAPID RESPONSE PLATFORM provides researchers and BC public health system researchers and policymakers with access to rapid systematic reviews, literature and scoping reviews, meta-analyses synthesis and response research capacity. The KNOWLEDGE TRANSLATION PLATFORM will strengthen systems and strategies for pandemic knowledge sharing across both academic and public sectors.

The Scientific Co-Directors provide academic leadership to the Institute, with a non-academic Executive Director providing institute management and administration. The Research Management Committee, which includes the Co-Directors, Research Theme Leads, Platform Leads, and Executive Director, provides oversight of the Institute.

In addition to more faculty members, PIPPS is recruiting additional staff to support the non-academic activities associated with non-research functions that have been established to meet the requirements set out in the government funding transfer agreement.

#### PROCEDURES FOR RATIFYING NEW MEMBERS:

The Institute will recruit and fund through full or partial salary additional scientists, based at SFU or elsewhere, who will be considered members. These roles may be to establish and lead further research themes or as research scientists within the Institute. Funding may come from the initial investment from the Government of BC or from external grants. The recruitment process will largely be open and competitive although there may be exceptions when targeted appointments are made. Consideration will be given to cross-appointments with other universities.

#### **AFFILIATES:**

The PIPPS Affiliates Program invites applications from academic faculty, research scientists, trainers and educationalists, and public health practitioners from across BC and beyond to become an Affiliate of the Institute. Its purpose is to extend the reach of the Institute, build interdisciplinary and intersectoral connections and collaborations, and catalyze existing expertise. While not official representatives of PIPPS, Affiliates are invited to work with PIPPS to amplify the capacities of the Institute and advance the mission of PIPPS for the benefit of the province. Contributions of Affiliates include:

- Collaborating on a research project with PIPPS research scientists,
- supporting the delivery of services by the Rapid Response Hub or Knowledge Translation platform
- Producing outputs relevant to PIPPS' mandate such as research papers, policy briefs, briefing notes, podcasts and presentations
- Participating in the development and funding of strategic research initiatives that strengthen BC capacity
- Contributing to funding proposals and advancement efforts
- Support training activities by supervising a trainee, producing resources or codelivering/co-hosting training activities
- Hosting PIPPS events that bring together researchers, practitioners, policymakers and/or community members
- Participating in knowledge translation and public engagement activities
- promoting the work of PIPPS through professional and community networks

An Affiliate is eligible for a range of benefits from PIPPS, which may include the following:

- Influencing the development and implementation of work plans for research themes
- Networking and collaborating with PIPPS scientists, institutional partners, and other Affiliates
- Priority access to workshops and training opportunities offered to research scientists, public health practitioners, and trainees

- Collaborating on research projects and the co-production of outputs
- Collaborating on the submission of funding proposals with PIPPS research scientists and affiliates

Applications for Affiliate status will be reviewed twice yearly (March/September) by the PIPPS Research Management Committee. Successful applicants will be appointed to a three-year term and renewable upon review. Applicants will be notified by email.

Application for Affiliate status is based on the following criteria:

- Excellence in research, teaching, practice, or community impact
- Relevance of Applicant's expertise to one or more PIPPS research themes
- Extent the Applicant's proposed contributions will strengthen and support the vision and mission of PIPPS
- Capacity of PIPPS to support the preferred needs of the Applicant

Together, Research Affiliates and Collaborators extend the reach of the Institute, help to build connections and collaborations across the province's research and practice community, catalyze existing expertise, and amplify the capacities of the Institute.

#### TRAINING AND MENTORSHIP OPPORTUNITIES FOR STUDENTS:

As above, PIPPS includes three core functions, one of which is Learning and Teaching. A key component within this core function is a focus on training and mentoring opportunities for fellows, interns, and trainees, both across SFU and in other BC research institutions and organizations.

The Learning and Teaching core function includes three major activity streams as follows:

- 1) Share specialized research knowledge
- Teaching undergraduate and graduate students, fellows and interns
- Creating and offering new specialized courses and other learning opportunities, both online and in person and accredited and non-accredited (e.g. MOOC, workshops, short courses, etc.)
- 2) Sponsor fellowships & internships
- Supporting additional postgraduates, fellows, and intern positions, including in collaboration with other academic institutions and research organizations
- 3) Develop research connections
- Working with other academic institutions to jointly develop and offer specialized courses, providing added value to existing post-graduate programs (e.g., UBC School of Population and Public Health
- Engaging researchers and trainees both at SFU and across other academic institutions

# RESEARCH INSTITUTE 5-YEAR GOALS AND KEY PERFORMANCE INDICATORS

PIPPS FIVE YEAR GOALS, OBJECTIVES & METRICS 2022-2027					
GOAL ONE: ACHIEVE EXCELLENCE					
	Objective	Metric			
i.	Recruit high calibre research scientists	Number of permanent PIPPS research scientists			
ii.	Increase the value of PIPPS external research awards for pandemic-related research	Research awards and grants received by PIPPS researchers, numbers, value, and sources			
iii.	Raise the profile of PIPPS as a global research institution	Number of publications, presentations, and citations			
GOAL	TWO: BUILD RESEARCHER CA	APACITY			
	Objective	Metric			
iv.	Support collaboration and knowledge management across academic institutions	Number of formal cross-institution partnerships/ joint research partnerships with other research institutions and organizations			
٧.	Strengthen and expand researcher knowledge and specialized skills	Number of new teaching and training opportunities (course events, SFU/other institution students)			
vi.	Increase post graduate students, fellows, and interns	Number of graduate students, postdoctoral fellows sponsored by PIPPS			
GOAL	_ THREE: TRANSFER KNOWLED	)GE			
	Objective	Metric			
vii.	Support the research to policy agenda by supporting rapid analysis of research findings and commissioned research	Rapid Response Platform activity and user evaluation			
viii.	Strengthen the public health sector's capacity by facilitating greater access to and participation in research	Number of embedded researchers/ joint PH sector/PIPPS research projects			
ix.	Strengthen the public's resiliency to future pandemics by increasing broad public understanding of the science of pathogens and pandemics through public awareness and education	Formal strategies in place and events held (e.g., conferences, webinars, Grand Rounds, poster sessions, etc.), participation of health regions/communities/groups, citations in popular press, evaluation results associated with specific projects			

# CURRENT RESOURCES AND FUTURE SUSTAINABILITY:

# Collaborations:

strategies

As a collaborative institute, PIPPS already has established a wide range of important working partnerships and collaborators, including:

Western Washington University • York University • University of British Columbia • Yale University • Migration Policy Institute • Council on Foreign Relations • London School of Hygiene and Tropical Medicine • London School of Economics and Political Science • BC Ministry of Health • BC Centre for Disease Control • BC Health Authorities • First Nations Health Authority • Canadian Department of National Defence • CANMOD • CoVaRR-Net • EIDM Networks • HKU Med • International Air Transport Association (IATA) • National Microbiology Laboratory • Oxford University • PANGEA HIV Consortium • SafeCare BC • University of Maryland • US Centers for Disease Control (CDC) • Wellcome Trust Sanger Institute • World Health Organization (WHO) • Canadian Institute for Health Information

# Funding:

While PIPPS was initially established through the generosity of a \$15M three-year (extended to five years) grant from the BC Government, in less than two years PIPPS researchers have attracted over \$6M in competitive research grants and contracts.

PIPPS also receives in-kind support from SFU and is eligible to receive cash support from university donors. A fundraising strategy will be established with the SFU Advancement Office.

## Sustainability Plan:

The initial \$15M received from the BC Government has financially supported the establishment of PIPPS foundations. Projecting the current success with external research awards and contracts promises ongoing sustainably.

WOULD THE ESTABLISHMENT OF THIS INSTITUTE ENABLE THE MEMBER RESEARCHERS TO ATTRACT FUNDING BEYOND WHAT THEY WOULD BE ABLE TO DO ON THEIR OWN? PLEASE EXPLAIN.

As noted above, PIPPS is intentionally designed as a 'collaborative institution,' building on SFU's strong tradition of external engagement. The Institute will work closely with other research institutes and organizations, all levels of government, and the public.

PIPPS also is a uniquely interdisciplinary institute, bringing together researchers from diverse fields to simultaneously address common problems using different lenses, thereby optimizing a 'whole of society' response.

The level of collaboration across fields as different as mathematics and social sciences reflects a highly modern perspective and opens PIPPS to many funding opportunities that a strictly discipline-based approach would not.

#### COMMUNICATION PLAN:

Provide a description of a communication plan that is aligned with University Communication policies, including plans for maintaining an up-to-date web/social media presence.

PIPPS launched its website (https://pipps.ca/) in September 2022, delayed due to an embargo imposed by the provincial government. A more comprehensive communications plan is an essential component of the Knowledge Translation Platform and is under development. One of PIPPS's key objectives is to strengthen systems and strategies for knowledge sharing across both academic and public sectors.

#### **EVIDENCE OF SUPPORT:**

Attached to this application are letters of support from the Dean, SFU Faculty of Health Sciences, and the Dean, SFU Faculty of Science.

Strong support for PIPPS was received from BC's five regional health authorities and First Nations Health Authority during a recent consultation process.

Please include evidence of support from the Dean or Associate Dean, Research of the home Faculty of the proposed Institute Director (mandatory).

Applicants may feel free to submit additional supporting documents such as letters of support and constitutions (if available).

Date: 11/2/2022

Applicant Signature:

Interim Executive Director

**PIPPS** 

By signing this form, the applicant confirms they have reviewed <u>SFU Policy R40.01</u> and <u>related Procedures</u> and agrees to conduct its activities in accordance with University policies.