

Knowledge Translation Planning Tools for Allergic Disease Researchers



KNOWLEDGE TRANSLATION PLANNING TOOLS FOR ALLERGIC DISEASE RESEARCHERS

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We welcome feedback and insights arising from your use of this tool.

We hope that you find this planning tool helpful. AllerGen envisions this document as organic; it will evolve with the benefit of your feedback. Future versions will reflect new understanding gained from your input.

If you have suggestions that will improve this tool, please contact:

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FOREWORD

AllerGen NCE Inc., the Allergy, Genes and Environment Network, (est. 2004), is a national research network funded by Industry Canada through the Networks of Centres of Excellence (NCE) Program. AllerGen's mandate is to support research, networking, commercialization, knowledge mobilization and capacity building activities that contribute to reducing the morbidity, mortality and socio-economic impacts of allergic diseases.

AllerGen's long-term goal is to create an enduring network of allergy and immune disease experts whose discovery and development efforts contribute to reducing the impact of allergic and related immune diseases nationally and globally.

AllerGen invests in leading-edge, multidisciplinary allergy, asthma and anaphylaxis research of strategic importance to the generation of new knowledge that contributes to improved health and productivity of Canadians and benefits the Canadian economy.

AllerGen's research investments are directed towards three overarching themes:

1. Programme A – Gene-Environment Interactions

Strategic Focus: Genetics, environmental exposures and gene-environment interactions in allergy and asthma

2. Programme B – Diagnostics and Therapeutics

Strategic Focus: Biomarkers, immune monitoring and drug development/discovery

3. Programme C – Public Health, Ethics, Policy and Society

Strategic Focus: Allergic disease management and surveillance

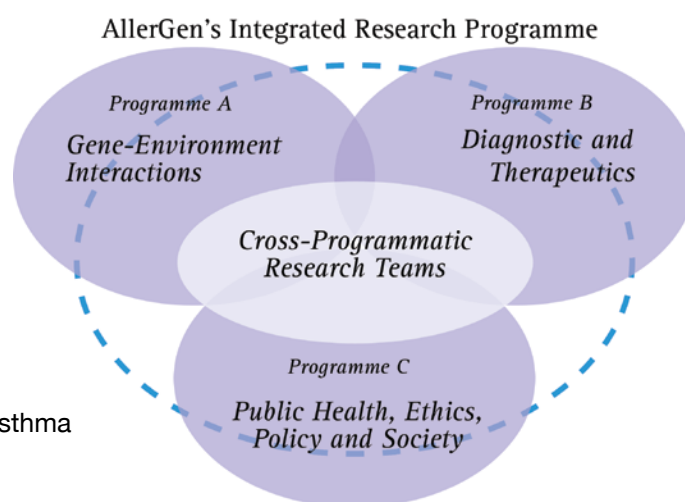
Within these three themes, AllerGen also invests in four cross-programmatic, multidisciplinary research teams:

4. Established Cross-programmatic Teams

- i The Canadian Healthy Infant Longitudinal Development (CHILD) Study
- ii Food Allergy and Anaphylaxis

5. Emerging Cross-programmatic Teams

- iii Mind-Body Interactions and Allergic Disease
- iv Occupational and Work-related Allergy and Asthma



AllerGen places a high priority on the use of Network research results by key stakeholders positioned to put these results to use. AllerGen's key stakeholders include, but are not limited to:

- The pharmaceutical sector
- Healthcare providers including clinicians, asthma educators, nurses, nurse practitioners and emergency response teams
- Policy makers
- Patient-information and support groups and organizations
- Other researchers.

This workbook has been developed to assist allergy, asthma and anaphylaxis researchers, research trainees and their collaborating partner organizations to develop a knowledge translation plan for research projects that positions potential uses and users of their ensuing discoveries “front and centre” in their initial research plans.

AllerGen encourages all allergy, asthma and anaphylaxis researchers to use this tool to facilitate and accelerate the success of their knowledge exchange and application efforts and to ensure that their research results generate the greatest possible degree of social and economic benefits for Canadians.



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INTRODUCTION

Knowledge translation (KT) is the term used by the Canadian Institutes of Health Research (CIHR) to describe the dynamic and iterative processes that include synthesis, dissemination, exchange and ethically-sound application of knowledge to improve the health of Canadians, provide more effective health services and products and strengthen the health care system.

In general terms, KT is a process that aims to engage potential stakeholders in the research process and place research results into the hands of organizations and individuals who can apply them in practice. It is also about communicating and sharing research results in new ways that inspire people to think and/or act differently. While there are a variety of terms used in the literature to refer to this process (e.g., knowledge transfer, exchange, uptake and mobilization, utilization and diffusion), the KT process is achieved through transmission and exchange of information and also through extensive dialogue between the producers and users of research. KT involves careful consideration of the experiences and information needs of stakeholders to enhance the creation of new theory, improve the overall quality of research and facilitate the application of research to practice and policy.

CIHR distinguishes between two types of KT efforts: Integrated Knowledge Translation (Integrated KT) and End-of-grant Knowledge Translation (End-of-grant KT).

In integrated KT, stakeholders or potential research knowledge users are engaged in the entire research process, working together to shape the research process and collaboratively determine research questions, decide on the methodology, participate in data collection and tools development, interpret findings and help disseminate research results. This approach, also known as collaborative research, action-oriented research and co-production of knowledge should produce research findings that are more relevant to and used by end-users.

End-of-grant KT includes the typical dissemination and communication activities undertaken by most researchers, such as KT to peers through conference presentations, publications in peer-reviewed journals and publishing results in open access journals or repositories, now required of all CIHR-supported research since January 1, 2008 (See <http://www.cihr-irsc.gc.ca/e/32005.html>). End-of-grant KT can also involve more intensive dissemination activities that tailor the message and medium to a specific audience such as summary briefings to stakeholders, interactive educational sessions with patients, practitioners and/or policy makers, media engagement and involves the use of knowledge brokers. The commercialization of scientific discoveries is another form of end-of-grant KT. (CIHR: <http://www.cihr-irsc.gc.ca/e/39033.html>)

It is important to develop an appropriate KT strategy as part of your initial research plan to maximize the value of research for those who can benefit from its results. Integrated KT is consistent with AllerGen's networked, multisectoral and multidisciplinary approach to research wherein researchers and knowledge users work together to identify research questions, decide on methodology, and interpret and disseminate findings tailored to specific audiences.

This document, *Knowledge Translation Planning Tools for Allergic Disease Researchers*, provides a comprehensive overview of factors to consider in developing an integrated KT strategy. Effective KT is a **continuous process** which starts during the development of a research project. With this process in mind, the tools in this document are designed for use from the beginning of your research project throughout

its duration to help create and implement a comprehensive KT strategy. Project team members should consider the items mentioned in this KT tool in developing a plan for achieving research project objectives. The tools are based on the following six questions to help you and your research team to enhance the knowledge transfer potential of your research:

1. What are the most important aspects to consider when establishing a KT strategy?
2. What are the outputs of your research (e.g., findings, concepts, methodologies, tools)?
3. Who are the potential users of your research outputs?
4. What is the most effective way to make contact and interact with those users (e.g., how to bring knowledge to the clinician)?
5. How can potential users be involved in meaningful ways throughout the research project?
6. What do users need to know about your research in order to understand it and assess its value for potential uptake?

There are two integrated KT planning tools in this document targeted at two different sets of users:

1. Part A is intended for use by Biomedical Researchers, and
2. Part B is intended for use by Clinical, Health Services and Population/Public Health researchers.

*“Two versions of the tool
for distinct audiences...”*

This integrated KT planning tool can also be adapted for the development of an End-of-Grant KT plan. Part C of this document, contains an End-of-Grant KT planning guide.

HOW WERE THE KT TOOLS DEVELOPED?

In 2005/06 researchers associated with the Chair on Knowledge Translation and Innovation at Laval University and the Atlantic Health Promotion Research Centre (AHPRC) at Dalhousie University dedicated themselves to identifying factors that contribute to an effective KT strategy. After these factors were identified, information from 98 innovative tools on KT was synthesized to isolate the critical elements applicable to stroke research. With permission and support from the research authors, in 2009, AllerGen NCE Inc. assembled a team to tailor these same tools for use by Network-supported allergic and related immune disease researchers. The tailored document was then reviewed by AllerGen’s Research Management Committee (RMC) and Policy, Ethics and Law Society Committee (PELS) to ensure alignment with the context of allergic and related immune disease research, which includes allergy, asthma and anaphylaxis. Each question posed in the tools is supported either by credible internet sources or by factors identified in the literature to improve KT. Factors found to be associated with a successful KT strategy include:

- the effort users put into acquiring knowledge
- the degree to which research results fit the situation of the user
- the extent to which research results are disseminated among research users
- the linkage between researchers and users of research
- the quality and type of research
- publication assets
- sources of funding
- type of research (e.g., quantitative and qualitative methodologies)
- the context of the researcher and the research user.

HOW TO USE THE KT TOOLS

The two integrated KT tools in this document were designed to help maximize the effectiveness of your KT strategy. There are no right or wrong answers. Each tool has three main sections:



Knowledge generation is defined as the development of research outputs or research syntheses; knowledge transfer is defined as the communication of research outputs to potential users; and knowledge uptake is defined as the uptake and use of research by potential users. Under these sections there are theme areas (e.g., assessing the outputs of your research) with checklists designed to help you identify areas for planning and improving your KT strategy. The checklist has the following format: first, the item to consider is identified; second, four categories have been provided to help you evaluate your progress in achieving the item (Done, To be done or NA [not applicable], By Whom, and When); and at the end of each section there is a space for additional notes related to the emerging “To-do” list.

| Items to Consider | Done | To be done or NA | By Whom | When |
|-------------------|------|------------------|---------|------|
| | | | | |

If you have already addressed a particular item, check the “Done” box. If you can improve your efforts, make notes about next steps in the “To be done” box, identify who will lead the required actions and by when these actions should be completed. Because each research study or program is unique, some items will not apply to your research team. If an item does not apply to your team, write “NA” in the “To be done” box. After completing the tool, review each item on the checklist and summarize the items in a “To do” list. You can use this list to create a work plan for your KT strategy, which should include proposed actions, research team roles/responsibilities and an associated time-line.

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PART A: A KNOWLEDGE TRANSLATION PLANNING TOOL FOR BIOMEDICAL RESEARCHERS

SECTION 1 - KNOWLEDGE GENERATION

1.1 Including KT in the Early Stages of Your Research

This section will help you identify information you could gather from different stakeholders (potential users) potentially interested in your research outputs. This information should be considered at the beginning of the research project (*i.e.*, before or during the preparation of your grant proposal).

| In developing your research project you should consider: | Done | To be done or NA | By Whom | When |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------|---------|------|
| Using ideas and information obtained through collaboration with other researchers in public and private research institutions including hospitals, universities and government laboratories | | | | |
| Using ideas and information from generalists and specialists | | | | |
| Using ideas and information from individuals with allergy and asthma and their families, patient organizations and community groups | | | | |
| Using ideas and information from policy-makers involved in decision-making related to prevention, treatment and management of allergic disease | | | | |
| Developing a strategy to ensure training for research trainees, new research professionals and other personnel | | | | |
| Using ideas and information from business magazines, patent databases, industry newsletters, industry associations and technology transfer organizations | | | | |
| Using ideas and information from business, venture capital and intellectual property specialists | | | | |
| Issues regarding intellectual property ownership and protection | | | | |

1.2 Assessing the Outputs from Your Research

This section will help you identify the outputs from your research project.

| Consider project outputs: | Notes | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--|--|--|
| List potential outputs generated by your research project (e.g., concepts, theoretical frameworks, methods, findings, technologies, syntheses, cures): | | | | |
| Describe the groups with which you will want to share your outputs, how to engage them in your research project and in what capacity: | | | | |

| Consider whether or not your project will add to the advancement of knowledge by: | Done | To be done or NA | By Whom | When |
|-----------------------------------------------------------------------------------|------|------------------|---------|------|
| Validating or contradicting previous knowledge in your field of research | | | | |
| Shedding light on fundamental understandings about allergic disease | | | | |

1.3 Building KT Capacity Among Your Research Team Members

This section helps you identify how each research team member can play a role in maximizing KT and the applicability of research outputs.

| To maximize the KT potential of your research outputs you should: | Done | To be done or NA | By Whom | When |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------|---------|------|
| Define team members' roles, tasks and commitments that facilitate the application of research outputs to your disease | | | | |
| Ensure that team members share a common vision about how the research outputs can be applied to your disease | | | | |
| Identify one or more team members who will be in charge of establishing contacts with disease-based organizations and other relevant agencies | | | | |
| Identify people who will be in charge of forming connections with individuals in business, venture capital and intellectual property protection | | | | |
| Establish an advisory group to consider the diverse viewpoints of each one of the project's stakeholders as appropriate (e.g., health services, government agencies, non-government organizations, health care consumers, funding agencies) | | | | |

Notes:

1.4 Evaluating Project Fit with Your Funding Agency's Research Objectives

This section highlights areas that might be important to your funding agency.

| When conducting your research, you should consider the importance of: | Done | To be done or NA | By Whom | When |
|---------------------------------------------------------------------------------------------------------------------------------------|------|------------------|---------|------|
| Developing, identifying and protecting intellectual property resulting from your research | | | | |
| Developing new products, processes and services resulting in socio-economic benefits | | | | |
| Developing a strategic alliance with a company or participating in the launch of a start-up company to commercialize your discoveries | | | | |
| Forming collaborations with researchers outside the region to enhance the quality and use of the research outputs | | | | |
| Improving or developing practices in allergic disease prevention, treatment and management | | | | |
| Contributing to management and policy decisions in allergic disease prevention, treatment and management | | | | |

Notes:

1.5 Assessing Partnerships

This section helps you analyze what partnerships and contractual arrangements are important to ensure that your research outputs are used.

| In order to maximize the application of your research outputs you should: | Done | To be done or NA | By Whom | When |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------|---------|------|
| Identify the types of resources (e.g., human, financial) and partnerships needed to carry out the project | | | | |
| Assess partner resources (human, material and financial) such as scientific expertise, clinical affairs and production facilities, capitalization and market or distribution channels that might be leveraged for mutual benefit in the research process and dissemination of results | | | | |
| Assess whether partnerships or collaborations with other research organizations or private firms are needed to translate your research outputs into improving allergic disease prevention, treatment and management | | | | |
| Consider a partnership agreement outlining the roles and responsibilities of those involved in applying your research | | | | |
| Improving or developing practices in allergic disease prevention, treatment and management | | | | |
| Assess whether specialized services such as routine labs, specialized labs or production and manufacturing services should be contracted out | | | | |

Notes:

SECTION 2 - KNOWLEDGE TRANSFER

2.1 Sharing Research Outputs

This section highlights activities to maximize the use of your research outputs.

| To effectively disseminate your research outputs you should: | Done | To be done or NA | By Whom | When |
|--------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------|---------|------|
| Share outputs with your funding agency | | | | |
| Share outputs with other researchers | | | | |
| Share outputs with students | | | | |
| Share your outputs with specialists in business, venture capital and intellectual property protection | | | | |
| Share research results with individuals with allergy and asthma and their families, and disease-based patient and research funding organizations | | | | |

Notes:

| Consider different dissemination formats for your research outputs: | Done | To be done or NA | By Whom | When |
|-----------------------------------------------------------------------|------|------------------|---------|------|
| Articles in scientific or professional journals | | | | |
| Bulletins and newsletters | | | | |
| Care pathways | | | | |
| Case reports | | | | |
| Clinical practice guidelines | | | | |
| Health technology assessment reviews | | | | |
| Patient and/or professional educational tools | | | | |
| Presentations and seminars | | | | |
| Publications that focus on evidence-based health care | | | | |
| Research syntheses | | | | |
| Systematic reviews (including meta-analysis) | | | | |
| Technical reports | | | | |
| Websites and listserves, open access journals and online repositories | | | | |

Notes:

2.2 Protection of Intellectual Property

These elements need to be considered after the research is completed and when you have products to share.

| You should consider whether or not you need to protect your research outputs by: | Done | To be done or NA | By Whom | When |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------|---------|------|
| Developing non-disclosure or confidentiality agreements (e.g., between a university lab and a biotech firm) | | | | |
| Protecting trade secrets (information that is secret or not generally known in the industry and that gives its owner an advantage over competitors, i.e., identities and preferences, vendors, product pricing and marketing strategies) | | | | |
| Preparing patent applications (a contract between the government and the inventor of a technology that is new, useful and not obvious) | | | | |

| If you become involved in patenting activities, you will need to: | Done | To be done or NA | By Whom | When |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------|---------|------|
| Conduct a preliminary search in the Canadian Patents Database on the Internet, at the Patent office, with TechSource and/or at the public library | | | | |
| Assess the patentability of your invention in terms of novelty, utility and ingenuity in collaboration with your institution's technology transfer office and the Network | | | | |
| Seek help from intellectual property experts at your institution and within the Network or a patenting agent to help you through the patenting process | | | | |
| Fill out a patent application | | | | |
| Share research results with individuals with allergy and asthma and their families, and disease-based patient and research funding organizations | | | | |

| After patenting you will need to consider the following options: | Done | To be done or NA | By Whom | When |
|----------------------------------------------------------------------------------------------------------------------------------------|------|------------------|---------|------|
| Sign a licensing agreement (granting one or more companies the right to manufacture and sell your invention in exchange for royalties) | | | | |
| Sell the patent | | | | |
| Launch a start-up firm | | | | |

SECTION 3 - KNOWLEDGE UPTAKE

3.1 Development of Medical Devices for Prevention and Treatment

This section focuses on the uptake of research and how it can contribute to the development of medical devices for the prevention and treatment of allergic disease.

| To validate whether or not your research outputs can affect the development of new medical devices, you should: | Done | To be done or NA | By Whom | When |
|----------------------------------------------------------------------------------------------------------------------------------------------|------|------------------|---------|------|
| Validate the applicability of your technology by going through proof-of-concept stages | | | | |
| Ensure that both the quality and quantity of the product can be maintained in production mode | | | | |
| Furnish the technical support needed to transform your technology into improvements in allergic disease prevention, treatment and management | | | | |

Notes:

3.2 Development of Therapeutics for Prevention and Treatment of Disease

This section highlights how research outputs can contribute to the development of therapeutics for the prevention and treatment of allergic disease.

| To validate the development of a new allergic disease treatment based on your research outputs, you should work in collaboration with individuals who are responsible for: | Done | To be done or NA | By Whom | When |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------|---------|------|
| Basic laboratory investigations and animal-model testing (pre-clinical testing) | | | | |
| Evaluating the safety, dose range and side effects of this new treatment (frequently referred to as Phase One clinical trials) | | | | |
| Measuring the safety and effectiveness in trials with people who have the condition requiring treatment (Phase Two clinical trials) | | | | |
| Making the treatment widely available to doctors and patients in order to collect information for regulatory authorities on the safety and effectiveness of the treatment (Phase Three clinical trials) | | | | |
| Comparing this treatment to existing treatments under normal conditions (Phase Four clinical trials) | | | | |

Notes:

3.3 Business Management and Market Analysis

This section helps you assist professionals in the development of a business plan that could help implement your findings in another location. A business plan serves as a blueprint with step-by-step instructions on how to translate an idea into a profitable new product or service.

| When participating in the development of a business plan for the commercialization of your discoveries, you should: | Done | To be done or NA | By Whom | When |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------|---------|------|
| Assess potential customers' needs and expectations | | | | |
| Ensure that your plan is unique and better than those of competitors | | | | |
| Show that you can provide the appropriate management expertise and skills the business will need to succeed | | | | |
| Make clear how much money, types of skills and extent of resources you are seeking for milestones and financing rounds | | | | |
| State clearly the potential returns on an investment in your project | | | | |
| Develop a marketing strategy taking into account the particular characteristics of the target markets such as size, trends, drivers, internal influences and market segments | | | | |

Notes:

3.4 Assessing Commercialization Funding Opportunities

This section helps you identify what venture capital funding agencies are looking for. It also helps identify what criteria will be used in judging your project.

| When looking for venture capital funding you should: | Done | To be done or NA | By Whom | When |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------|---------|------|
| Explore and assess sources of funding such as venture capital, conventional sources, angel investors, family and government sources | | | | |
| Browse venture-fund websites to obtain a list of funds investing the amount you need for your type of product | | | | |
| Ask your advisors and contacts for suggestions about which venture funds are actively investing and likely to be interested in your type of product | | | | |
| Focus your efforts on identifying and approaching three or four venture funds whose investment criteria most closely match your investment proposition | | | | |
| Draw up a business plan, before approaching potential investors, that is well researched, well presented and meets funding requirements | | | | |
| Get feedback from venture capital funders if your request for funding is denied | | | | |

| Make sure your business case is based on: | Done | To be done or NA | By Whom | When |
|-------------------------------------------------------------------------|------|------------------|---------|------|
| A sufficiently developed product or process | | | | |
| An excellent management team | | | | |
| An excellent business plan | | | | |
| A wide-ranging and/or in-progress product line (portfolio) | | | | |
| A completed or in-progress product development phase (proof-of-concept) | | | | |
| Robust intellectual property | | | | |

PART B: A KNOWLEDGE TRANSLATION PLANNING TOOL FOR CLINICAL, HEALTH SERVICES & POPULATION/PUBLIC HEALTH RESEARCHERS

SECTION 1 - KNOWLEDGE GENERATION

1.1 Including KT in the Early Stages of Your Research

This section will help you identify information you could gather from different stakeholders (potential users) potentially interested in your research outputs. This information should be considered at the beginning of the research project (*i.e.*, before or during the preparation of your grant proposal).

| In developing your research project you should consider: | Done | To be done or NA | By Whom | When |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------|---------|------|
| Using ideas and information obtained through collaboration with other researchers in public and private research institutions including hospitals, universities and government laboratories | | | | |
| Using ideas and information from generalists and specialists | | | | |
| Using ideas and information from individuals with allergy and asthma and their families, disease-based organizations and community groups | | | | |
| Using ideas and information from policy-makers involved in decision-making related to prevention, treatment and management of allergic disease | | | | |
| Using ideas and information from managers in health services organizations, physicians and other health professionals | | | | |
| Developing a strategy to ensure training for research trainees, new research professionals and other personnel | | | | |
| Identifying how the research outputs will benefit in the prevention, treatment and management of allergic disease | | | | |

1.2 Assessing the Outputs from Your Research

This section will help you identify the outputs from your research project.

| Consider project outputs: | Notes |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| List potential outputs generated by your research project (e.g., concepts, theoretical frameworks, methods, findings, technologies, syntheses, cures): | |
| Describe the groups that you will want to share your outputs with, how to engage them in your research project and in what capacity: | |

| Consider whether or not your project will add to the advancement of knowledge by: | Done | To be done or NA | By Whom | When |
|-----------------------------------------------------------------------------------------------------------|------|------------------|---------|------|
| Validating or contradicting previous knowledge in the field of allergic disease prevention and treatment | | | | |
| Shedding light on issues related to allergic disease prevention, treatment and management | | | | |
| Providing solutions to specific problems related to allergic disease prevention, treatment and management | | | | |

1.3 Building KT Capacity Among Your Research Team Members

This section helps you identify how each research team member can play a role in maximizing KT and the applicability of the research outputs.

| To maximize the KT potential of your research outputs you should: | Done | To be done or NA | By Whom | When |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------|---------|------|
| Define team members' roles, tasks and commitments that facilitate the application of the research outputs to allergic disease prevention, treatment and management | | | | |
| Ensure that team members share a common vision about how the research outputs can be applied to allergic disease prevention and treatment | | | | |
| Identify one or more team members who will be in charge of establishing contacts with individuals with allergy and asthma and their families, disease-based organizations and other relevant agencies | | | | |
| Identify people who will be in charge of forming connections with individuals in business, health care decision-making, government and other relevant sectors | | | | |
| Establish an advisory group to consider the diverse viewpoints of each one of the project's stakeholders as appropriate (e.g., health services, government agencies, non-government organizations, health care consumers, funding agencies) | | | | |

Notes:

1.4 Evaluating Project Fit with Your Funding Agency's Research Objectives

This section helps you identify how each research team member can play a role in maximizing KT and the applicability of the research outputs.

| When conducting your research, you should consider the importance of: | Done | To be done or NA | By Whom | When |
|--------------------------------------------------------------------------------------------------------------------|------|------------------|---------|------|
| Publishing your findings in relevant scientific journals | | | | |
| Publishing your findings in open access journals or online repositories | | | | |
| Publishing your discoveries in professional publications (e.g., Medical Post) | | | | |
| Forming collaborations with research teams in other disciplines relevant to the goals of the funding agency | | | | |
| Forming collaborations with researchers outside the region to enhance the quality and use of your research outputs | | | | |
| Improving or developing practices in allergic disease prevention, treatment and management | | | | |
| Contributing to policy decisions in allergic disease prevention, treatment and management | | | | |

Notes:

1.5 Assessing Partnerships

This section helps you analyze what partnerships and contractual arrangements are important to ensure that your research outputs are used.

| In order to maximize the application of your research outputs you should: | Done | To be done or NA | By Whom | When |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------|---------|------|
| Identify the types of resources (e.g., human, financial) and partnerships needed to carry out the project | | | | |
| Assess partner resources (human, material and financial) such as scientific expertise, communication or distribution channels that might be leveraged for mutual benefit in the research process and dissemination of results | | | | |
| Assess whether partnerships or collaborations can be developed with stakeholders and health-services organizations for the improvement of allergic disease care and prevention and the integration of research results into policy or practice | | | | |
| Forming collaborations with researchers outside the region to enhance the quality and use of your research outputs | | | | |
| Consider a partnership agreement outlining the roles and responsibilities of those involved in applying your research | | | | |

SECTION 2 - KNOWLEDGE TRANSFER

2.1 Sharing Research Outputs

This section highlights activities that could maximize potential use of your outputs.

| To effectively disseminate your research output you should: | Done | To be done or NA | By Whom | When |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------|---------|------|
| Share results with your funding agency | | | | |
| Share outputs with other researchers | | | | |
| Share outputs with students | | | | |
| Share outputs with specialists in business, venture capital and intellectual property | | | | |
| Share research results with individuals with allergy and asthma and their families and with disease-based patient and research funding organizations | | | | |
| Share outputs with all project stakeholders, such as the general public using the popular media | | | | |
| Share outputs with health care decision-makers and government policy-makers | | | | |
| Share outputs with stakeholders and organizations outside the scholarly community | | | | |
| Facilitate the exchange of expertise between members of your team and organizations outside the scholarly community (e.g., staff exchange, equipment transfer) | | | | |
| Work as a consultant or advisor for private firms, government agencies or other organizations | | | | |

| Consider different dissemination formats for your research outputs: | Done | To be done or NA | By Whom | When |
|------------------------------------------------------------------------|------|------------------|---------|------|
| Articles in scientific or professional journals | | | | |
| Bulletins and newsletters | | | | |
| Briefing notes | | | | |
| Care pathways | | | | |
| Case reports | | | | |
| Clinical practice guidelines | | | | |
| Health technology assessment reviews | | | | |
| Mainstream media e.g., newspapers, magazines | | | | |
| Patient and/or professional educational tools | | | | |
| Presentations and seminars | | | | |
| Publications that focus on evidence-based health care | | | | |
| Research syntheses | | | | |
| Systematic reviews (including meta-analysis) | | | | |
| Technical reports | | | | |
| Websites and listserves | | | | |
| Other format identified by research team members and research partners | | | | |

Notes:

2.2 Assessing Users' Skills

This section will help you to assess if your potential users are able to understand your research outputs, so you can translate your outputs into a format that they will understand (e.g., Are they familiar with statistics?).

| In order to assess research users' skills you should: | Done | To be done or NA | By Whom | When |
|-------------------------------------------------------------------------------------------------------------------------|------|------------------|---------|------|
| Identify the users' capacity to interpret technical aspects of research reports (e.g., statistics) | | | | |
| Determine whether potential users will have the skills, attitudes and awareness needed to benefit from research outputs | | | | |
| Determine the potential users' regular vocabulary and take it into consideration when presenting your research outputs | | | | |

2.3 Keeping in Touch with Users

This section will help you develop a strategy for effective communication between your research team and the potential users of your research outputs throughout the project.

| To keep in touch with users you should: | Done | To be done or NA | By Whom | When |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------|---------|------|
| Develop a plan to build and maintain direct relationships with intended users throughout the project (this may include: conferences, meetings, informal contacts, electronic mail, regular mail, phone and other means) | | | | |
| Have periodic briefings and produce progress reports during the course of the study to generate interest in the research outputs | | | | |
| Have person-to-person contact with potential users to ensure that the research outputs are clearly related to users' needs | | | | |
| Develop clear-language tools for users based on their needs | | | | |
| Identify leaders inside user organizations who can initiate change at every level of the organization and if possible, actively involve these people in the project | | | | |

2.4 Developing a Dissemination Strategy

This section highlights important points for you to consider when developing a dissemination strategy. These items should be considered early in the project, although the final strategy may not be finalized until the outputs are known.

| In developing an explicit dissemination strategy you should: | Done | To be done or NA | By Whom | When |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------|---------|------|
| Establish clear and measurable dissemination goals with intended users | | | | |
| Identify types of media and others who can best deliver research results to potential users (e.g., opinion leaders, health charities, television reporters, newspaper columnists, websites, radio, etc.) | | | | |
| Promote the access and availability of research outputs by developing products for the target audience such as briefing notes, brochures and websites | | | | |
| Verify that the release of research outputs takes into account where and how the user will apply your research outputs | | | | |

Notes:

2.5 Connecting Research Outputs with Potential Users of the Research

This section helps you tailor your research outputs to users' abilities.

| In adapting research results for dissemination you should: | Done | To be done or NA | By Whom | When |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------|---------|------|
| Customize research results to targeted user groups (e.g., journalists, general public, other researchers, clinicians, decision-makers) | | | | |
| Summarize research outputs in lay language (e.g., an executive summary, relatively brief text and appendices documenting detailed methods, data and analysis) | | | | |
| Emphasize key messages and recommendations so that users know how to take concrete action | | | | |
| Include “real world” examples: use storytelling or conduct demonstrations on how to use the research outcomes (bring the findings to life!) | | | | |
| Develop reports and products appealing to specific target audiences (e.g., use illustrations, color, humour and packaging as appropriate) | | | | |
| Ask for feedback from potential users before providing the final reports to the funder | | | | |
| Provide technical assistance to make it easier to understand the implications of using the research outputs (e.g., information help-lines) | | | | |

SECTION 3 - KNOWLEDGE UPTAKE

3.1 Assessing Current Practices in the Field of Allergic Disease Prevention and Treatment

This section focuses on the uptake of research and how it can contribute to improving current practices in the field of allergic disease prevention and treatment.

| To validate whether or not your research outputs can improve allergic disease prevention and treatment you should: | Done | To be done or NA | By Whom | When |
|--------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------|---------|------|
| Assess the feasibility of implementing improved practices in allergic disease prevention, treatment and management | | | | |
| Assess the benefits of the proposed practices in comparison with current practices | | | | |
| Make plans to facilitate the uptake of research outputs | | | | |
| Suggest specifically how proposed changes in practice will result in better outcomes for the improvement of allergic disease care and prevention | | | | |

3.2 Assessing Management and Policy-Decision Improvements

This section highlights how your research outputs can contribute to management and policy decisions.

| In order to see the potential applicability of your research outputs to management and policy decisions you should: | Done | To be done or NA | By Whom | When |
|-------------------------------------------------------------------------------------------------------------------------------|------|------------------|---------|------|
| Assess if your research outputs shed light on issues related to management and policy decisions | | | | |
| Compare the current situation to a situation where your research outputs were implemented in the past | | | | |
| Consider whether or not your research outputs validate and support previous management and policy decisions | | | | |
| If appropriate, work with key decision/policy-makers in allergic disease-based organizations, government and community groups | | | | |

3.3 Assessing Your KT Strategy

This section will help you assess the effectiveness of your KT strategy. In other words, what difference did your research have on allergic disease prevention and treatment?

| To assess your KT strategy, verify whether the users: | Done | To be done or NA | By Whom | When |
|------------------------------------------------------------------------------|------|------------------|---------|------|
| Received your research reports and/or results | | | | |
| Read and understood your research outputs | | | | |
| Cited your research outputs | | | | |
| Attempted to implement outputs from your research | | | | |
| Used your results to update their methodologies or practices | | | | |
| Used your results to influence choices and decisions | | | | |
| Used your results to make specific changes in their organization or policies | | | | |

Notes:

PART C: GUIDE TO END-OF-GRANT KNOWLEDGE TRANSLATION

| End-of-Grant Knowledge Translation Plan Worksheet ¹ | | |
|----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Factor ² | Key Questions | Options |
| Goals | <ul style="list-style-type: none"> Have the broader KT goals of raising awareness and promoting action been broken down into specific, clear, concrete and well-justified outcome and impact statements relevant to your research findings? Are your KT goals appropriate to the research findings and target audience(s)? | KT goals could include: <ul style="list-style-type: none"> <input type="checkbox"/> increase knowledge/awareness <input type="checkbox"/> inform future research <input type="checkbox"/> inform/change attitudes <input type="checkbox"/> inform/change behaviour <input type="checkbox"/> inform/change policy <input type="checkbox"/> inform/change practice <input type="checkbox"/> inform/change technology <input type="checkbox"/> other: |
| Audience | <ul style="list-style-type: none"> Does the plan consider all potentially relevant audiences? Are the audiences precisely defined in terms of their sector, roles, responsibilities and decision-making needs/opportunities? Does the plan demonstrate a thorough understanding of the proposed target audience(s), including the current state of their knowledge in the research area and their needs and preferences for using knowledge? | Target audiences could include: <ul style="list-style-type: none"> <input type="checkbox"/> community-based and not-for-profit organizations <input type="checkbox"/> general public <input type="checkbox"/> healthcare professionals/service providers <input type="checkbox"/> health system administrators/managers <input type="checkbox"/> industry/venture capital group <input type="checkbox"/> media (print, TV, etc.) <input type="checkbox"/> patients/consumers <input type="checkbox"/> policy-makers/legislators <input type="checkbox"/> private sector <input type="checkbox"/> research funders <input type="checkbox"/> researchers <input type="checkbox"/> other: |
| Strategies | <ul style="list-style-type: none"> Are the strategies appropriate to achieve knowledge diffusion with little customization of the research evidence; dissemination of tailored messaging to specific audiences; and/or application and use of the evidence? Does the plan take into consideration the context in which the knowledge is to be used? If appropriate, is there a plan to adapt the knowledge for each specific audience? | Strategies could include: <p>Diffusion</p> <ul style="list-style-type: none"> <input type="checkbox"/> conference presentations <input type="checkbox"/> non-peer reviewed publications <input type="checkbox"/> peer reviewed publications <input type="checkbox"/> technological provision/upgrade <input type="checkbox"/> web-based activities (open access journal/repository postings, wikis, blogs, podcasts, etc.) <input type="checkbox"/> other: <p>Dissemination</p> <ul style="list-style-type: none"> <input type="checkbox"/> arts-based KT activity <input type="checkbox"/> communities of practice <input type="checkbox"/> dissemination events/courses (e.g., conference, symposium, CME) <input type="checkbox"/> engage champion(s)/opinion leader(s) <input type="checkbox"/> interactive small group meetings/workshops |

¹ This table was adapted with permission from a summary under development within the CIHR Knowledge Translation Portfolio, December 2009.

² These factors are the same regardless of the domain of research, though how they apply will vary.

| End-of-Grant Knowledge Translation Plan Worksheet ¹ | | |
|----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Factor ² | Key Questions | Options |
| Strategies (continued) | <ul style="list-style-type: none"> Have mitigating factors been considered that might affect the applicability of the research findings or the effectiveness of the planned KT activities? Does the plan consider barriers and facilitators to knowledge use? Are key messages clearly identified? | <input type="checkbox"/> knowledge broker involvement <input type="checkbox"/> media release/outreach campaign <input type="checkbox"/> networks/networking <input type="checkbox"/> plain language summaries <input type="checkbox"/> reminders <input type="checkbox"/> social marketing <input type="checkbox"/> summary briefings to stakeholders <input type="checkbox"/> other: Application Working with knowledge-user(s) to: <input type="checkbox"/> adapt knowledge for use <input type="checkbox"/> conduct performance audits and analyze feedback <input type="checkbox"/> commercialize <input type="checkbox"/> introduce decision-supports (e.g., web-based) <input type="checkbox"/> develop educational materials/sessions <input type="checkbox"/> identify barriers to use of findings <input type="checkbox"/> introduce interventions to promote use <input type="checkbox"/> other: |
| Expertise | <ul style="list-style-type: none"> Are all necessary participants involved to achieve the stated goals? Is there sufficient description of participants' KT expertise and/or past activities to assess the team's ability to execute the proposed strategies? Where appropriate, does the team plan to collaborate with members of its target audience(s)? | Expertise required could include: <input type="checkbox"/> communications, media and marketing <input type="checkbox"/> information and communications technology <input type="checkbox"/> knowledge brokering <input type="checkbox"/> knowledge translation <input type="checkbox"/> management <input type="checkbox"/> other: |
| Resources | <ul style="list-style-type: none"> Does the budget allocate adequate financial support to implement the plan? | Necessary resources could include: Personnel <input type="checkbox"/> design/layout <input type="checkbox"/> knowledge broker <input type="checkbox"/> KT specialist <input type="checkbox"/> public relations/marketing <input type="checkbox"/> writer/editor/copy editor Consumables <input type="checkbox"/> mailing and postage <input type="checkbox"/> media development and release <input type="checkbox"/> open access publication fees <input type="checkbox"/> production/printing <input type="checkbox"/> teleconferences/travel/consultation <input type="checkbox"/> web-related costs (blogs, podcasts, wikis, website development/maintenance) <input type="checkbox"/> workshops/meetings/networking costs <input type="checkbox"/> other: |

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**AllerGen's Mission:**

AllerGen's mission is to catalyze and support discovery, development, networking, capacity building, commercialization and knowledge translation that contribute to reducing the morbidity, mortality and socio-economic burden of allergic and related immune diseases.

AllerGen's Vision:

AllerGen's vision is to create an enduring network of allergy and immune disease experts whose discovery and development efforts contribute to reducing the impact of allergic and related immune diseases nationally and globally.

AllerGen's Strategic Goals are to:

- Catalyze and support innovative research that contributes to the discovery of the causes of and ways to prevent, control or eliminate allergic and related immune diseases.
- Catalyze and facilitate the development of new research platforms, tools, processes, products and services arising from discoveries, and promote their commercialization, their use and their influence on public policy.
- Develop and maintain networking and partnership arrangements that enable knowledge and technology exchange and exploitation (KTEE) and reposition Canada at the forefront of innovation.
- Create new opportunities for the training of highly qualified personnel in allergy research, patient care, innovation and the health system, and advance professional and lay knowledge about allergic and related immune diseases.
- Provide responsible, cost effective and accountable management, administration and support to all aspects of AllerGen's activities.



 **AllerGen**

Allergy, Genes and Environment Network