ACCOUNTABILITY REPORT 2009

OFFICE OF RESEARCH Department of Anesthesia Dalhousie University













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EXECUTIVE SUMMARY

The Department of Anesthesia developed its Research Accountability Framework in 2008 to articulate research activities and establish clear expectations against which performance would be identified, measured, reported and evaluated. This **Accountability Report (2009)** is the product of the Framework's *Measurement and Reporting Plan* in which key indicators and targets were identified for subsequent measurement and reporting. It covers the time period from January to December 2009 and includes information from prior years for comparative and trending purposes.

Representative indicators of research activity and productivity were identified and are reported here against our targets.

AREAS IN WHICH THE DEPARTMENT MET ITS TARGETS IN 2009 INCLUDE:

- New proposals developed into research endeavours.
- Number of recognition awards.
- Proportion of projects, proposals and manuscripts that are collaborative.
- Proportion of researchers who serve as members or reviewers for research ethics boards, editorial boards, professional associations, granting agencies, scientific journals.
- Proportion of researchers invited to review, organize, chair and offer expert opinion.
- Proportion of researchers involved in initiatives targeted at applying or translating research.

AREAS IN WHICH THE DEPARTMENT **PARTIALLY MET ITS TARGETS** IN 2009 INCLUDE:

- Number and value of grants and contracts. These numbers are lower in 2009 than in 2008, but higher than 2007 and prior years, so the trend is still generally upward. The higher grant funding total in 2008 is partly explained by two Canada Foundation for Innovation awards reflected in that calendar year.
- Number of associate and full professors. The department met its targets for proportion of full professors and for promotion success rates, but not for the proportion of researchers at the associate professor level. However, the proportion of researchers at various ranks is consistent with the demographic profile of researchers (stage of career).
- Proportion of action items completed from strategic plan each year. This report is made one third of the way through the strategic planning (academic) year. Still, 80% of actions are complete, underway or ongoing.
- Number of publications. Cumulative totals across all publication types (articles, abstracts, books) are at a four year low relative to protected research time. However, the rate is only marginally lower than prior years and largely attributable to a book publication in 2008 and the associated book chapter credits associated with it. Articles, arguably the most significant indicator in this category, are stable relative to previous years.

AREAS IN WHICH THE DEPARTMENT **DID NOT MEET ITS TARGETS** IN 2009 INCLUDE:

- Researcher satisfaction with services provided by Office of Research. The target was 90% satisfaction rate; survey result is 89% satisfaction rate.
- Number of presentations relative to protected research time. Presentation rates are at a five year low relative to protected time.

The results of this report will be used in the implementation of the Research Accountability Framework's *Evaluation Strategy.*

INTRODUCTION

The Department of Anesthesia identified the need for a research accountability framework during a departmental strategic planning exercise. The research accountability framework was subsequently developed by a working group of departmental researchers and research management staff in a collaborative process. Through it, the department attempted to recognize the value of the full scope of scholarly research activity, from engaging in the process of creativity, to implementing research projects, to communicating the results, and influencing clinical best practice. The Research Accountability Framework was adopted by the Department of Anesthesia in December, 2008.

THE ACCOUNTABILITY FRAMEWORK HAS FOUR SECTIONS:

- **1. Profile.** In this section, we describe the need for an accountability framework in the context of our office of research and describe our governance structure.
- 2. **Results chain.** In this section, we provide a flow chart that ties resources devoted to research to the outcomes through a logical sequence of activities and outputs.
- **3. Measurement and reporting plan.** A key element of the accountability framework is the identification of the most appropriate indicators of research activity and productivity, our current targets, how to measure the indicators and how to report the results.
- 4. **Evaluation strategy.** The purpose of measuring and reporting results is to inform sound performance management and decision-making. The evaluation strategy outlines a cyclical, iterative strategy for on-going learning from our results and adjusting our strategy as required.

This **Research Accountability Report (2009)** covers the time period from January to December 2009. It is the product of the Framework's *Measurement and Reporting Plan* in which key indicators and targets were identified for subsequent measurement and reporting. The results of this report will be used in the implementation of the *Evaluation Strategy*. Consistent with the *Results Chain*, the report reflects the activity of clinician researchers with protected time (time funded by the department) for research.

SCHOLARLY CURIOSITY

Engage in the process of creativity

INDICATOR: Number of new proposals that are developed into research endeavours

TARGET: At least 3 new research endeavours / projects annually

Residents have engaged in 11 new research endeavours.

Residents are required to fulfill research requirements as part of their five-year residency program. The department has 29 residents (2009/2010). In 2009, the Resident Research Director developed the department's resident research framework with the intent of engaging all residents in research and critical appraisal endeavours in a way that is appropriate to their background and interests while ensuring they meet the department's documented standards.

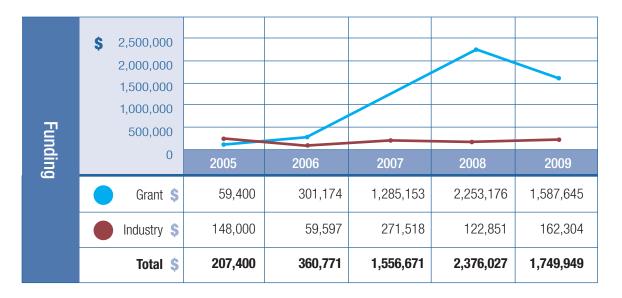
Noteworthy in 2009: the Anesthesia Research Day program was successfully filled to capacity with research presentations from learners (residents and students) for the first time in recent memory.

Engage in the process of research (act as leader, innovator, change agent)

INDICATOR: Number and value (\$) of grants & contracts received

TARGET: Trending reflects maintenance or increase from previous years relative to protected research time

Value of grants and contracts received (\$)



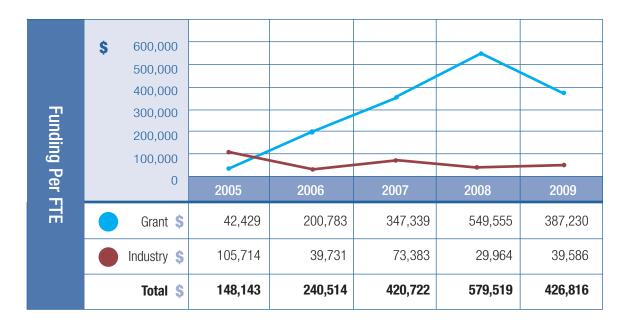
SCHOLARLY CURIOSITY (CONT'D.)

The value of research funding each year includes revenue from all research awards generating funds in that year (for multi-year awards, the revenue is reported in the year it is budgeted). All research projects in which a department researcher is a team member are included.

Number of grants and contracts received. The number of grants received reflects the number of grants and contracts generating funds that year (which may be continuing from earlier years).

		2005	2006	2007	2008	2009
# \$	Grant	2	5	10	23	17
# \$ Awards	Industry	2	3	4	3	2
rds	Total	4	8	14	26	19

Value and number of grants and contracts received relative to FTE of protected time for research. The number of grants received reflects the number of grants and contracts generating funds that year (which may be continuing from earlier years).



SCHOLARLY CURIOSITY (CONT'D.)

		2005	2006	2007	2008	2009
# Av	Grant	1.4	3.3	2.7	5.6	4.1
# Awards/FTE	Industry	1.4	2.0	1.1	0.7	0.5
/FTE	Total	2.8	5.3	3.8	6.3	4.6

The number and value of grants and contracts is lower in 2009 than in 2008, but higher than 2007, so the trend is still generally upward. In 2008, the number of funding awards received was higher and 70% of those awards were for less than \$50,000 in that year (versus 59% in 2009). The higher grant funding total in 2008 is partly explained by two Canada Foundation for Innovation awards (over \$500,000) being reflected in this calendar year.

INDICATOR: Number of associate and full professors

TARGET: 50% of researchers will be at professor level, 30% at associate level; and 60% of research related promotion applications are successful.

Rank	n	%
Full Professor	7	64%
Associate Professor	1	9%
Assistant Professor	3	27%

In 2009, one researcher was promoted from associate professor to full professor (100% success rate).

The proportion of researchers at various ranks is consistent with the demographic profile of the researchers (relative to the stage of their career).

INDICATOR: Number of recognition awards

TARGET: Trending reflects maintenance or increase from previous years relative to protected research time

SCHOLARLY CURIOSITY (CONT'D.)

Number of recognition awards.

	2005	2006	2007	2008	2009
Awards	7	6	7	3	7

Five researchers received recognition awards for achievements (receiving 7 awards in total) in 2009.

Number of recognition awards relative to FTE of protected time for research.							
	2005	2006	2007	2008	2009		
# Awards/FTE	5.0	4.0	1.9	0.7	1.7		

SCHOLARLY SYNTHESIS

Actively seek out collaborative opportunities with interdisciplinary colleagues

- **INDICATOR:** Number of collaborative projects, proposals and manuscripts
- **TARGET:** 80% of all projects are collaborative

Of 59 publications, 56 have co-authors (95%).

Of 24 funded grants and contracts, 14 have co-investigators (58%).

Therefore, 70 out of 83 projects and publications are collaborative (84%).

Sit on scientific organizing committees

INDICATOR: Number of researchers who serve as members or reviewers for research ethics boards, editorial boards, professional associations, granting agencies, scientific journals

TARGET: 40% of researchers are reviewers / members locally, 30% nationally, 10% internationally

Scope	# Associations, Agencies, Boards, Journals	# Researchers	Proportion of Researchers
Local	25	7 / 10	70%
National	36	7 / 10	70%
International	55	7 / 10	70%

INDICATOR: Number of researchers invited to review, organize, chair and offer expert opinion

TARGET: 50% of researchers invited to review, organize, chair and offer expert opinion

Six out of ten researchers invited to review, organize or chair (60%).

SCHOLARLY SYNTHESIS (CONT'D.)

Engage In the administrative process

INDICATOR: Engage in planning activities to advance the research mission

TARGET: 80% of action items completed from strategic plan each year

Status	# Actions	% Actions	
Done	13	27	
Ongoing (never completely done)	15	31	80 %
Progress underway	11	22	
No progress	10	20	20 %
TOTAL	49		

The actions in this year's research strategic plan run from September 2009 to August 2010; the status reported above is effective December 2009, one third the way through the strategic planning (academic) year.

The Office of Research led the development of its first strategic plan in 2009. Four priority actions were identified for 2009/2010:

- **1.** Participate in the department's mentorship program
- 2. Develop and implement a communication strategy to keep the public informed of our activities
- **3.** Identify research foci for the department
- 4. Procure adequate office, meeting and lab space

Noteworthy in 2009: The department was the featured department at the QEII Foundation's *Excellence in Research Gala*. The theme was *Pain: A Global Experience* and the event raised almost \$170,000. Over 40 department members volunteered to help on the night of the Gala, many of whom also participated in months of planning prior to the event to make it a record-breaking success.

SCHOLARLY SYNTHESIS (CONT'D.)

INDICATOR: Researcher satisfaction with services provided by Office of Research

TARGET: 90% researcher satisfaction rate with services provided by Office of Research

Surveys were sent to researchers with protected time for research (including two from Critical Care), the principal users of the services of the Office of Research. Nine of twelve responses were received (75% response rate) to the following question: *How satisfied are you with the services provided by the Office of Research?*

Response	n
Very satisfied	4
Satisfied	4
Undecided	1
Dissatisfied	-
Very Dissatisfied	-

This reflects an 89% satisfaction rate.

Noteworthy in 2009: Consulting expertise was secured for a part-time Senior Research Consultant and Research Methods and Statistical Consultant. The Anesthesia Research Advisory Committee was constituted and began its quarterly meetings in February 2009.

SCHOLARLY TRANSLATION

Linking theory to practice activities

- **INDICATOR:** Number of initiatives (e.g. programs, conferences, educational sessions) targeted at applying or translating research
- TARGET:
 30% of researchers are engaged in knowledge translation activities

Six out of ten researchers engaged in knowledge translation activities (60%).

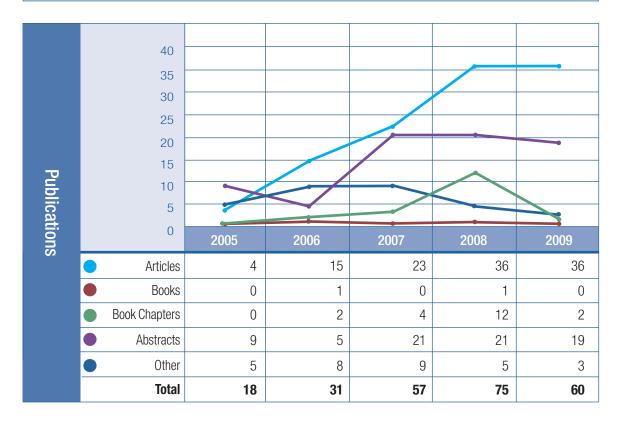
SCHOLARLY COMMUNICATION

Writing and publishing

INDICATOR: Number of submitted and accepted publications (peer reviewed & non-peer reviewed)

TARGET: Trending reflects maintenance or increase from previous years relative to protected research time

Number of submitted and accepted publications (peer reviewed & non-peer reviewed)



SCHOLARLY COMMUNICATION (CONT'D.)

Number of submitted and accepted publications (peer reviewed & non-peer reviewed) relative to FTE of protected time for research.

Publications Per FTE	11.0 9.0 7.0 5.0 3.0 0		2006	2007	2000	
IS Pe	Articles	2005 2.9	10.0	2007 6.2	2008 8.8	2009 8.8
r FT	Books	0.0	0.7	0.0	0.2	0.0
Ш	Book Chapters	0.0	1.3	1.1	2.9	0.5
	 Abstracts 	6.4	3.3	5.7	5.1	4.6
	• Other	3.6	5.3	2.4	1.2	0.7
	Total	12.9	20.6	15.4	18.2	14.6

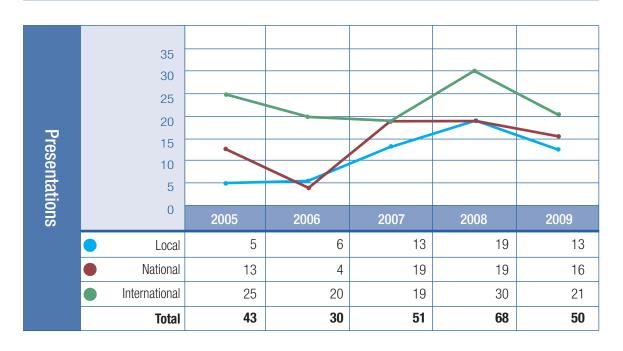
Although cumulative totals across all publication types are at a four year low relative to protected research time, the publication rate is only marginally lower than prior years and largely attributable to a book publication in 2008 and the associated book chapter credits (n=8) associated with it. Articles, arguably the most significant indicator in this category, are stable relative to previous years.

Preparing and delivering presentations

INDICATOR: Number of presentations (local, national, international)

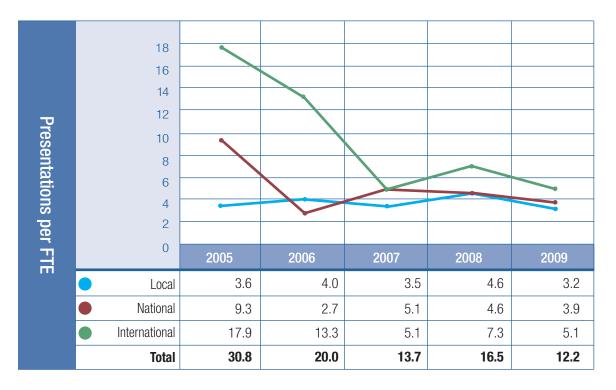
TARGET: Trending reflects maintenance or increase from previous years relative to protected research time

SCHOLARLY COMMUNICATION (CONT'D.)



Number of presentations (local, national, international)

Number of presentations (local, national, international) relative to FTE protected time for research.



APPENDIX A - Calculation of Protected Time for Research

FTE P	otected Time – Anesthesia

	2005	2006	2007	2008	2009
FTE Protected Time	1.4	1.5	3.7	4.1	4.1