



FACULTY OF MEDICINE



DEAN'S TASK FORCE ON MD UNDERGRADUATE  
CURRICULUM RENEWAL



APPENDIX G | MAY  
2010



a place of mind

THE UNIVERSITY OF BRITISH COLUMBIA

## Draft Terms of Reference for Implementation Working Groups



## TABLE OF CONTENTS

Social Responsibility and Accountability .....	4
Student Assessment.....	8
Admissions .....	11
Health System and Inter-professional Education .....	13
Curriculum Design .....	15
Curriculum Governance.....	17
Academic Learning Communities .....	19
Scholarship .....	22



## Implementation Working Group on Social Responsibility and Accountability DRAFT Terms of Reference April 2010

### Mandate

UBC's MD undergraduate program and its outcomes must be aligned with society's needs in order to produce physicians who are able to meet those needs. The Social Responsibility and Accountability working group will take the work of the DTFCR on social responsibility, including the stakeholder's report and the report on the future of health care and translate it into a social responsibility framework for the MD Undergraduate program. It will complete this work by July 2010 in order to feed into the work of the groups on Exit Outcomes, Admissions and Curriculum Design. It will then lead the revision of the 'Mission, Goals and Objectives' of the MD Undergraduate program to be completed by December 2010. It will establish the processes whereby the medical school will report on its social responsibility framework, its actions and devise a process whereby the Faculty will continually renew its social responsibility mandate.

### Reporting

This Implementation Working Group reports to the Implementation Task Force.

### Timeline

Complete the social responsibility framework by July 2010; complete the revision of the MD Undergraduate Program's 'Mission, Goals and Objectives' document by December 2010. Finalize processes for reporting on and renewing social responsibility by June 2011.

### Tasks

1. Translate the DTFCR Social Responsibility and Accountability reports into a framework for UBC's undergraduate MD program.
2. Engage stakeholders (i.e., patients, public; underserved populations; BCMA; health authorities) and consult widely in the discussion of the framework.
3. Work with the Admissions and Exit Outcomes Implementation Working Groups as well as the Education Council and Council of Undergraduate Associate Deans to communicate the revised social responsibility mandate, and evaluate educational plans with respect to the mandate.
4. Establish a process for engaging external stakeholders; identify the possibilities and limits of medical education for realizing goals; propose a mechanism for ongoing partnerships.
5. Recommend a continuous process to maintain the social responsibility and accountability framework current over time.
6. Recommend a process for evaluating and reporting social accountability outcomes on a regular basis.



## Membership

(It is expected that at least one member of each Implementation Working Group will be drawn from the DTFCR or its working groups.)

Faculty member – frontline teacher

Representatives from at least two distributed sites (IMP, NMP, SMP), Associate dean if possible

ESU director

Assoc. Dean Admissions

Clinical Education Fellow or junior faculty member

Student rep

Secretariat support

## Resources

Social Responsibility and Accountability reports, Dean's Task Force on Undergraduate MD Curriculum Renewal

Future of Medicine report, Dean's Task Force on Undergraduate MD Curriculum Renewal

Evaluation plan, Dean's Task Force on Undergraduate MD Curriculum Renewal

Minutes of DTFCR and Faculty Retreat discussions, September 2009 – April 2010

Health Canada (2001). *Social Accountability: A Vision for Canadian Medical Schools*

Association of Faculties of Medicine of Canada (2010), *Admissions Requirements of Canadian Faculties of Medicine*.

Association of Faculties of Medicine of Canada (2010), Social Accountability Initiatives Database project  
<http://www.afmc.ca/social-initiatives-database-e.php>

Association of Faculties of Medicine of Canada (2010). *The Future of Medical Education in Canada: A Collective Vision for MD Education*.

UBC Faculty of Medicine (2005; last updated June 2009). *UBC MD Undergraduate Program: Mission, Goals & Objectives* (Green Book).

American Association of Medical Colleges (2008). *Roadmap to Diversity*.

Woollard, R. The Citizenship of Medical Schools. *The Network: Towards Unity for Health Newsletter* 22:2, December 2003, p. 18



## Implementation Working Group on Exit Outcomes and Competencies DRAFT Terms of Reference April 2010

### Mandate

The implementation working group on Exit Outcomes and Competencies is responsible for renewing the exit outcomes for the MD undergraduate program, the enabling competencies, standards and sequencing. Exit outcomes will be based on the social responsibility framework and the current goals of the program and other sources such as the FMEC recommendations, Carnegie recommendations, the MCC objectives, and the AAMC-HHMI competencies. This implementation working group is expected to coordinate their work with the Social Responsibility & Accountability and Student Assessment and the Curriculum Design implementation working groups.

The group is charged with addressing the tasks listed below. The current curriculum does not explicitly map outcomes to the curriculum nor does it specify the level of competency expected at each level of the program. These issues should be addressed in the working group's reports.

### Reporting

This Implementation Working Group reports to the Implementation Task Force.

### Timeline

The implementation working group will provide an initial report to the Implementation Task Force by September 30, 2010 to allow time for approval by the MDUPC in October and the full faculty in November 2010. Its work is likely to continue at least until June 2011. (?)

### Tasks

1. Explore best practices at other medical schools that can inform the creation and adoption of outcomes-based competencies for the new UBC curriculum
2. Articulate exit outcomes based on the curriculum's social responsibility and accountability framework.
3. Articulate enabling competencies that define the UBC curriculum as well as their sequence
4. Make decisions about the competency standards expected at graduation and at each level of training.
5. Set up small working groups to map enabling competencies, standards and sequencing for each exit competency.
6. Recommend an ongoing renewal process.



## Membership

(It is expected that at least one member of each Implementation Working Group will be drawn from the DTFCR or its working groups.)

Clinician Faculty member engaged in teaching in the MD Undergraduate program  
Postgraduate program director PGY generalist program; PGY1 resident

Representatives from at least two distributed sites  
Curriculum leader

## Resources

Secretariat support

Report of DTFCR Working Group 1: Outcomes and Competency-Based Assessment and associated files on the Curriculum Renewal SharePoint site.

Outcomes and Competencies folder in the general Curriculum Renewal resource library on SharePoint.

DTFCR Recommendation 2: Competency Based Curriculum

DTFCR Recommendation 3: Student Assessment

UBC MD Undergraduate Program Learning Goals and Objectives

Longworth K. The 2009 UBC Defined Competencies report. In addition to mapping the current UBC exit outcomes to the CanMEDS framework, the report provides a summary of outcome-based medical education.

Notes from the DTFCR and faculty retreat discussions concerning this topic



## Implementation Working Group on Student Assessment DRAFT Terms of Reference April 2010

### Mandate

This implementation working group is charged with the responsibility to create a systematic assessment framework for UBC's MD undergraduate program that reflects the renewed social responsibility framework and the outcomes-based goals as articulated by the Exit Outcomes and Competencies working group.

The current curriculum lacks a comprehensive competency-based assessment system to assure that our students have achieved specified standards of competence when they graduate. We recognize that some of the outcomes we seek, for example in the area of professional behaviour, may not be easily tracked by established assessment systems and that consideration of new and innovative methods will be needed. An exploration of these methods is expected to be part of the initial work completed before the exit outcomes are defined.

This Implementation Working Group reports to the Implementation Task Force.

### Timeline

The working group will begin in April 2010 by identifying and developing expertise in the range of competency-based assessment methods that are appropriate for a competency-based curriculum. It will also identify competency areas that are currently not well assessed in the current program and pilot new approaches. In phase 2, starting in late 2010, the working group will take the output from the Exit Outcomes group and map out the assessment framework and strategies. A final report is expected by March 2011.

### Tasks

1. Design an assessment system based on the exit competencies that will be integrated across years and disciplines.
2. Identify different assessment tools that will be useful to demonstrate the achievement of competencies, including behavioural and attitudinal competencies.
3. Integrate both formative and summative assessment methods consistent with exit and enabling outcomes.
4. Recommend a process for the development of rigorous assessment materials and processes to ensure common standards for the achievement of students across sites, irrespective of the diversity of educational contexts.
5. Oversee the development of assessment strategies and material for implementation in a



competency-based curriculum.

6. Coordinate the selection, planning and implementation of assessment pilots and propose actions to be taken as a result of evaluation of these pilots.
7. Ensure that the development of appropriate student assessment strategies are included in curriculum renewal pilots.
8. Work collaboratively with the Implementation Working Groups on Academic Learning Communities and Scholarship; it will also consult with the Promotions Committee
9. Review and consider collaboration and links with other medical schools and organizations in the development of assessment material.
10. Create a system that provides significant formative feedback to students so they may monitor and assess their progress towards exit competencies.
11. Design an assessment system that does not increase the current assessment burden, and ideally reduces it.
12. Recommend a faculty development program to build skills among all teachers for creating and employing new strategies for assessment.

### Membership

(It is expected that at least one member of each Implementation Working Group will be drawn from the DTFCR or its working groups.)

Clinician  
 Instructor  
 Clinical education fellow / junior scholar  
 Administrator  
 Representatives from at least two distributed sites  
 Curriculum leader  
 Possible Consultant: Dr. Kevin Eva  
 Secretariat support

### Resources

DTFCR Working Group 1: Outcomes and Competency-based Assessment  
 DTFCR Recommendation 2: Competency Based Curriculum  
 DTFCR Recommendation 3: Student Assessment  
 Chapter 3: Strengths and weaknesses  
 Notes from the DTFCR and faculty retreat discussions concerning this topic.



UBC Faculty of Medicine (2005; last updated June 2009). *UBC MD Undergraduate Program: Mission, Goals & Objectives* (Green Book).



## Implementation Working Group on Admissions DRAFT Terms of Reference April 2010

### Mandate

This implementation working group is charged with the responsibility to create a new admissions framework for the MD undergraduate program that reflects the renewed social responsibility and accountability framework and the new curriculum goals as articulated in the Final Report of the Dean's Task Force for Undergraduate MD Curriculum Renewal.

This Implementation Working Group reports to the Implementation Task Force.

### Timeline

The timeline for this implementation working group will be driven by the need for changes to be effective for student admission into the 2012 entering class.

### Reports

This Implementation Working Group reports to both the Implementation Task Force and the Admissions Policy Committee.

### Tasks

1. Consider a streaming system for admissions (Mission-based admissions) and identify the pros and cons.
2. Design an admissions system that encompasses the full range of goals and values reflected in the curriculum renewal report and that will produce graduates who address the social responsibility framework.
3. Coordinate the selection, planning and implementation of pilots for an admissions design; propose actions to be taken as a result of evaluation of these pilots.
4. Describe admissions tools and procedures that could be useful for recruiting and admitting students into particular streams.
5. Integrate academic and non-academic standards to create a multi-faceted yet coherent MDUP statement of admissions goals.
6. Consider whether to develop an admissions stream for clinician investigators.
7. Consider whether to enable an admissions stream for joint degrees.
8. Coordinate decisions with the Curriculum Design Implementation Working Group to create a smooth entry for new students into the program.



9. Develop an evaluation plan to evaluate how Admissions is addressing social responsibility goals such as diversity.
10. Work closely with the Implementation Working Group on Social Responsibility and the Implementation Working Group on Scholarship to ensure integration of efforts.

### **Membership**

(It is expected that at least one member of each Implementation Working Group will be drawn from the DTFCR or its working groups.)

Associate Dean, Admissions (Chair)  
Clinician teaching in the program  
Admissions committee representative(s)  
Student(s)  
MD / PhD Program Director  
Clinical education fellow / junior scholar  
Administrator  
Representatives from at least two distributed sites  
Curriculum leader  
Secretariat support

### **Resources**

DTFCR Report on Curriculum Renewal  
AAMC HHMI report  
Social responsibility framework



## Implementation Working Group on Health System and Inter-professional Education DRAFT Terms of Reference April 2010

### Mandate

The Working Group is charged with the responsibility to create pilots that support the implementation of the recommendation on Health System and Inter-professional Education. This working group will also provide a focus for the development of knowledge and expertise around the role of public health, e-health, patient safety and quality of care in the MD undergraduate program. Its work will feed into the Curriculum Design working group.

This Implementation Working Group reports to the Implementation Task Force.

### Timeline

An interim report is expected by November 2010 in order to facilitate planning and implementation of pilots for the 2011 – 2012 year; a final report is expected in March 2011.

### Tasks

1. Define the scope of the recommendation in terms of the UBC context.
2. Contact other health professional programs and groups; establish working meetings to coordinate efforts and propose attainable goals and timelines.
3. In collaboration with other health profession programs, design and propose curriculum innovation pilots that support the recommendation on Health System and Inter-professional Education.
4. Coordinate the selection, planning and implementation of pilots on Health System and Inter-professional education; Patient Safety; and E-Health as well as determine decisions to be taken as a result of evaluation of these pilots
5. Develop small, focused working groups for each of these initiatives.
6. Recommend a process to continue to address health system issues in the undergraduate curriculum.
7. Maintain communications with the Curriculum Design working group and report the findings of pilots and other investigations.

### Membership

(It is expected that at least one member of each Implementation Working Group will be drawn from the DTFCR or its working groups.)

Clinician teaching in the undergraduate program.



Implementation Task Force member  
Representatives from other health profession programs at UBC  
E-Health rep  
Patient Safety rep  
Student  
Instructor  
Clinical education fellow / junior scholar  
Administrator  
Representatives from at least two distributed sites  
Curriculum leader  
Secretariat support

### Resources

DTFCR Final Report  
Canadian Patient Safety Institute, Safety Competencies (2009)  
World Health Organization, Towards Unity for Health Initiative position paper, "Interprofessional Education and Practice".  
World Health Organization, "Framework for Action on Interprofessional Education & Collaborative Practice" (2010).  
Health Canada, Patient Safety (2002)  
Leape Institute, Unmet Needs: Teaching Physicians to Provide Safe Patient Care (2010)



## Implementation Working Group on Curriculum Design DRAFT Terms of Reference September 2010

### Mandate

The working group will use the work of the Exit Outcomes and Student Assessment groups, the DTFCR recommendations and curriculum design principles to develop interim and final curriculum designs. It will coordinate the design, implementation and evaluation of pilots to take forward the recommendations in a coordinated manner. Working groups will be established for each major curriculum component. They will be responsible for developing a cluster of pilots and fostering the development of expertise for each recommendation, including faculty development.

This implementation working group is also charged with the responsibility to create pilots that support the restructuring of clinical education at UBC. This working group will create an academic program for the Junior and Senior clerkship as well as the Preparation for Residency programs. It will also make sure that students have opportunities to pursue integrated clerkship options. It will be cognizant of the role that continuity, integration and flexibility play in clinical education.

This working group will also propose opportunities for key stakeholders to provide feedback on curricular elements and design, as well as opportunities for public consultation by the Implementation Task Force at appropriate points in the development of a curriculum design.

This Implementation Working Group reports to the Implementation Task Force.

### Timeline

An interim report of this working group is expected by January 2011 in order to facilitate planning and implementation of pilots for the 2011-2012 academic year. A final report is expected by April 2011.

### Tasks

1. Develop curriculum models that incorporate all key recommendations adopted by the DTFCR.
2. Coordinate the selection, planning and implementation of pilots on Curriculum Design as well as determine decisions to be taken as a result of evaluation of these pilots .
3. Derived from the Exit Outcomes, their enabling competencies and standards, design a restructuring of clinical education.
4. Describe the role of Academic Learning Communities during clerkships.
5. Plan and pilot junior and senior clerkships.
6. Plan the role of technology in supporting continuity in clinical education (e.g. web-based



multimedia cases that build over the 4 years; simulation that allows students to follow the consequences of decisions and learn from mistakes).

7. Develop outcome indicators and standards of acceptability for evaluation as well as potential positive and negative outcomes for students, residents, patients, and faculty.
8. Once a student assessment system has been designed, propose assessments that support continuity and integration (e.g. progress testing; portfolios; integrated OSCEs, etc.)
9. Coordinate faculty development needs for pilots and other initiatives.
10. Hold consultations with key curriculum stakeholders at appropriate points in the curriculum design process.
11. Prepare a report on curriculum models for the Implementation Task Force.

### Membership

(It is expected that at least one member of each Implementation Working Group will be drawn from the DTFCR or its working groups.)

Clinician who teaches in the program

Student

Representatives from at least two distributed sites

Curriculum leader

Secretariat support

### Resources

DTFCR Final Report, including the Retreat Report

DTFCR working groups final reports

Curriculum Renewal Background Documents (SharePoint)



## Implementation Working Group on Curriculum Governance DRAFT Terms of Reference September 2010

### Mandate

This implementation working group is charged with the responsibility to examine the current system of curriculum governance for UBC's MD program, to describe where this governance works well and where there are problems, and suggest changes for future implementation. The working group is asked to consider how a process for ongoing curriculum renewal can be developed, implemented and supported over time. The working group is asked to examine models and best practices for curriculum governance, to consult widely within UBC and externally, and to report its findings to the Implementation Task Force by April 2011.

This Implementation Working Group reports to the Implementation Task Force.

### Timeline

A final report to the ITF is expected in April 2011.

### Tasks

1. Examine the current system of curriculum governance at UBC.
2. Describe the strengths and weaknesses of the current system.
3. Research principles of curriculum governance.
4. Explore best practices in curriculum governance at other schools.
5. Suggest ways of creating a curriculum governance structure at UBC that allows for continuous change to meet changing societal needs, provide continuous quality improvement and maintains excellence.
6. Design an evaluation system that helps keep the curriculum current, meets the needs of society and our students, and promotes quality and excellence.

### Membership

(It is expected that at least one member of each Implementation Working Group will be drawn from the DTFCR or its working groups.)

Clinician who teaches in the program  
Associate Dean  
Implementation Task Force member  
Administrator  
Representatives from at least two distributed sites

---



Curriculum leader

Consultant: From the Sauder School of Business, UBC

Secretariat support

### **Resources**

DTFCR Final Report

Others TBD



## Implementation Working Group on Academic Learning Communities DRAFT Terms of Reference September 2010

### Mandate

This implementation working group is charged with the responsibility to create pilots that support the implementation of Academic Learning Communities that span all 4 years of the UBC undergraduate MD program. This working group will create an academic program for the Academic Learning Communities that promote continuity, including the continuity of care, curriculum and supervision. Continuity of care refers to learning by following a patient through the entire course of illness; continuity of curriculum refers to learning in an integrated developmental stepped process; and continuity of supervision refers to learning through a close and ongoing relationship with preceptors and mentors throughout the four years of the program. This Implementation Working Group will also provide a focus for the development of knowledge and expertise around the role of Continuity in medical education. Its work will feed into the Curriculum Design working group.

Each Academic Learning Community will consist of approximately 128 students comprised of approximately 32 students from each program year.

This Implementation Working Group reports to the Implementation Task Force.

### Timeline

An interim report is expected by November 2010 in order to facilitate planning and implementation of pilots for the 2011 – 2012 year; a final report is expected in March 2011.

### Tasks

1. Derived from the Exit Outcomes and their enabling competencies, develop the principles behind Academic Learning Communities (ALCs), including the scope of their curriculum and their role in student assessment.
2. Review Academic Learning Community structures elsewhere, and in the context of the UBC program, recommend an academy structure, role and function in the program; formulate a plan for implementing ALCs, including a timeline.
3. Coordinate the selection, planning and implementation of ALC pilots on as well as propose decisions to be taken as a result of evaluation of these pilots
4. Recommend a new type of faculty position for senior educators in the Academic Learning Communities, including recruitment, compensation, and recognition
5. Coordinate with systems that engage and recognize clinical faculty contributions to enable interested clinical faculty to participate effectively in the ALCs.



6. Use the experiences in the NMP and IMP to map out expected outcomes and procedures.
7. Develop a funding and resource structure and evaluate the program's feasibility in the VFMP
8. Identify training and support needs, including faculty development.
9. Plan, pilot and evaluate educational activities that will take place within Academic Learning Community structures across all four years of the program. Recommend how technology can support continuity in ALC clinical education (e.g. web-based multimedia cases that build over the 4 years; simulation that allows students to follow the consequences of decisions and learn from mistakes).
10. Develop outcome indicators and the standard of acceptability for students, residents, patients, and faculty.
11. Manage the implementation and evaluation of each pilot.
12. Maintain communication with the Curriculum Design working group and report the findings of pilots and other investigations.

### Membership

(It is expected that at least one member of each Implementation Working Group will be drawn from the DTFCR or its working groups.)

Clinician teaching in the MD Undergraduate program  
 Chair of the DTFCR Working Group  
 Student  
 Instructor  
 Clinical education fellow / junior scholar  
 Administrator  
 Representatives from at least two distributed sites  
 Curriculum leader  
 Secretariat support

### Resources

DTFCR Final Report

DTFCR Working Group 4 Final Report

WG 4 SharePoint site

Hirsh DA et al. "Continuity" as an organizing principle for clinical education reform. *NEJM* 2007; 356: 858-866.

Learning Communities in Medical Education: review for discussion. Report prepared by Jean Jamieson for the Council of Undergraduate Associate Deans. February 2009



Learning Communities Institute website (additional resources under presentations)

<http://www.medicine.uiowa.edu/osac/Comminst/index.html>



## Implementation Working Group on Scholarship DRAFT Terms of Reference September 2010

### Mandate

Scholarship of all kinds encompasses common criteria: clear goals, adequate preparation, appropriate methods, significant results, effective presentation, and reflective critique. The DTFCR recommends that: the curriculum will provide opportunities for all students to pursue excellence, innovation and new knowledge through scholarship. The DTFCR recommended that a broad definition of scholarship should be adopted to include not only the scholarship of discovery, but also the scholarship of application, integration and teaching. While the opportunities for scholarly activity should ideally span all four years, provide appropriate supervision and guidance, and foster mentorship relationships, this is expected to develop slowly because of limitations of faculty resources. However, there may be a required scholarly curricular component for all students related to the core competencies, and an elective component for smaller numbers of students who wish to engage in more rigorous and in-depth study that may lead to a dual degree (e.g., a master's degree), or to a career pathway of a clinician scientist.

This implementation working group is charged with clarifying the faculty's objectives for students related to scholarship, identifying and enhancing existing opportunities for scholarship of the MD Undergraduate program related to scholarship. The IWG Scholarship will coordinate with the IWG Admissions; IWG Curriculum Design; IWG Exit Outcomes; and IWG Student Assessment.

### Reporting

The Implementation Working Group Scholarship reports to the Implementation Task Force.

### Timeline

An interim report is expected by November 2010 that addresses definitions of scholarship programs; the importance of scholarship opportunities; and outlines a plan as to how the faculty should move forward on this recommendation. A further report is expected for the 2011 – 2012 year outlining pilots and progress towards the overall goal; it is expected that this working group may continue to develop the theme of scholarship and implement incremental changes for 5 years (2015).

### Tasks

1. Review the current opportunities for scholarship in the MD Undergraduate program, including the Summer Student Research program, to enable access for all interested students.
2. Review the current student activities that could be classed as scholarship and consider how to formally monitor, evaluate and report these activities. Review the records of scholarly work currently undertaken by MD students to gauge the current level of student involvement in scholarly activity; identify faculty resources currently engaged in supporting or supervising this work to gauge the current level of faculty involvement.



3. Provide a means for assessing and recognizing outstanding scholarly projects currently undertaken by students; establish a framework for recognizing future work within a scholarship program for MD undergraduates.
4. Review examples of scholarly concentration programs at other medical schools, especially those in the USA, and determine which programs offer models that fit with UBC's mandate and context.
5. Work with the IWG Admissions to ensure evaluation of potential scholarship in applicants to ensure a subset admitted with potential to excel in this area.
6. Plan and pilot a process to encourage a small group of self-identified students to develop a 4-year research/scholarship track mentored by interested faculty.
7. Develop a communication and engagement strategy to develop discourse and understanding in the faculty.
8. Review specific degree programs at UBC and partnering universities that may be offered as a professional or scholarly choice (e.g. MD-PhD, MD-MEd, MD-MSc for research activities; as well as MHA; MPH; M E-Health; MSc Public Health, MD-MBA etc.) across the academic partners. Provide suggestions about whether and how dual degrees might be offered at UBC.
9. Using the DTFCR Final Report and the report of DTFCR Working Group 2 (Core Curriculum and Scholarly Interests), propose curriculum innovation projects and pilots that move the MD Undergraduate program towards ensuring opportunities for scholarship. Manage the implementation and evaluation of each pilot.
10. Consider the feasibility of requiring a scholarship program across all 4 years for all students; Develop a plan for implementing this recommendation, including assessing students' scholarly projects, finding mentors for student projects, and other resources necessary for the successful establishment of a formal student scholarship program.
11. Develop a long-term plan for the implementation of this recommendation.
12. Maintain communications with the IWG Curriculum Design and other IWG.

**Chair:** to be determined

### **Membership**

(It is expected that at least one member of each Implementation Working Group will be drawn from the DTFCR or its working groups.)

Clinician scientist

Director MD/PHD program

Principal College of Health Disciplines

Implementation Task Force member



## Student

MDUG research coordinator

Clinical education fellow / junior scholar

Representatives from at least two distributed sites

Curriculum leader

Secretariat support

## Resources

DTFCR Final Report

DTFCR Working Group 2 Report

DTFCR WG 2 Site on SharePoint

MD Undergraduate Program annual retreat report, June 2009, especially report from Group 9.

Parsonnet J, Gruposso P, Kanter S, Boninger M. Required vs. elective research and in-depth scholarship programs in the medical student curriculum. *Academic Medicine* 2010; 85 (3): 405-408.

Green E. et al. Encouraging scholarship: medical school programs to promote student inquiry beyond the traditional medical curriculum. *Academic Medicine* 2010; 85 (3): 409-418.

Laskowitz D, Drucker R, Parsonnet J, Cross P, Gesundheit N. Engaging students in dedicated research and scholarship during medical school: the long term experiences at Duke and Stanford. *Academic Medicine* 2010; 85 (3): 419-428.

Boninger M et al. Implementation of a longitudinal mentored scholarly project: an approach at two medical schools. *Academic Medicine* 2010; 85 (3): 429-437.

Bierer B, Chen C. How to measure success: the impact of scholarly concentrations on students – a literature review. *Academic medicine* 2010 85 (3): 438-452.

Scholarly Concentrations Programs Collaborative Listserv [sccollaborative@listserv.brown.edu](mailto:sccollaborative@listserv.brown.edu).

Examples of scholarly concentration Programs in the US can be found at the following websites:

Brown University: <http://med.brown.edu/education/concentrations/>

Stanford University: [http://med.stanford.edu/md/curriculum/scholarly\\_concentrations/](http://med.stanford.edu/md/curriculum/scholarly_concentrations/)

University of San Francisco

[http://health.usf.edu/medicine/educationalaffairs/educational\\_program\\_concentrations.html](http://health.usf.edu/medicine/educationalaffairs/educational_program_concentrations.html)

The Medical Student Scholars program at the University of Cincinnati College of Medicine

<http://www.med.uc.edu/medical/MedEd/Training/MSSP.cfm>

