Program & Abstracts

Memorial University of Newfoundland
St. John’s, Newfoundland & Labrador
July 9-11, 2011

in conjunction with
Festival 500 Sharing the Voices &
The Phenomenon of Singing International Symposium VIII
AIRS Members
Advancing Interdisciplinary Research in Singing
(as submitted September 2008)

**Director**
Prof. Annabel J. Cohen, University of Prince Edward Island (Psychology), Canada

**Co-Investigators**

Dr. Harold Abeles, Columbia University (Teachers College), United States

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Dr. Godfrey Baldacchino, University of Prince Edward Island (Sociology and Anthropology), Canada

Dr. Steven Brown, Simon Fraser University (Psychology), Canada

Dr. Patricia S. Campbell, University of Washington (School of Music), United States

Dr. Lily Chen-Hafteck, Kean University (Music), United States

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Prof. Stephen M. Clift, Canterbury Christ Church University College (Health & Social Welfare Studies), United Kingdom

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Dr. Darryl R. Edwards, University of Toronto (Faculty of Music), Canada

Dr. Mike A. Forrester, University of Kent, Canterbury (Psychology), United Kingdom

Dr. Bradley W. Frankland, Dalhousie University (Psychology), Canada

Prof. Ichiro Fujinaga, McGill University (Music Research), Canada

Dr. Martha A. Gabriel, University of Prince Edward Island (Webster Center for Teaching and Learning), Canada

Dr. Mary L. Gick, Carleton University (Psychology), Canada

Dr. Jane Ginsborg, Royal Northern College of Music (Research Center for Vocational Training of Musicians), United Kingdom

Prof. Petra Hauf, St. Francis Xavier University (Psychology), Canada
Dr. Rachel M. Heydon, The University of Western Ontario (Faculty of Education), Canada

Dr. Beatriz S. Ilari, Universidade Federal do Paraña (Deparmento de Artes), Brazil

Mr. Mark A. Leggott, University of Prince Edward Island (Robertson Library), Canada

Dr. Henrietta Lempert. University of Toronto (Psychology), Canada

Prof. Felix F.M. Neto, University of Porto (Faculty of Psychology and Education Science), Portugal

Dr. Jennifer J. Nicol, University of Saskatchewan (Educational Psychology and Special Education), Canada

Prof. Lawrence O’Farrell, Queen’s University (Faculty of Education), Canada

Dr. Susan A. O’Neill, The University of Western Ontario (Faculty of Music), Canada

Prof. Isabelle Peretz, Université de Montréal (Psychologie), Canada

Dr. Andrea M. Rose, Memorial University of Newfoundland (Music), Canada

Prof. Jaan Ross, University of Tartu, Estonia

Dr. Frank A. Russo, Ryerson University, Canada

Prof. Rena Sharon, The University of British Columbia (School of Music), Canada

Dr. Catherine J. Stevens, University of Western Sydney (MARCS Auditory Laboratories), Australia

Dr. Lauren Stewart, Goldsmiths University of London (Psychology), United Kingdom

Dr. Jennifer F. Sullivan, St. Francis Xavier University (Psychology), Canada

Dr. Kati Szego, Memorial University of Newfoundland (Music), Canada

Dr. Kate C. Tilleczek, Laurentian University (Sociology), Canada

Dr. Laurel Trainor, McMaster University (Psychology), Canada

Prof. Sandra E. Trehub, University of Toronto (Psychology), Canada

Dr. Christine D. Tsang, Huron University College (Psychology), Canada

Dr. George Tzanetakis, University of Victoria (Computer Science), Canada

Prof. Graham F. Welch, University of London (Institute of Education), United Kingdom
Collaborators

Dr. Betty A.V. Bailey, PEI Health Sector Council, Inc., Canada

Dr. Carol A. Beynon, The University of Western Ontario (Faculty of Graduate Studies), Canada

Dr. Chris M. Blanchard, Dalhousie University (Faculty of Medicine), Canada

Dr. Ian R.M. Cross, University of Cambridge (CMS – Centre for Music and Science), United Kingdom

Prof. Steven M. Demorest, University of Washington (School of Music), United States

Ms. Teresa M. Doyle, Prince Edward Island

Prof. Maija M. Fredrikson, University of Oulu (Education), Finland

Dr. Martin F. Gardiner, Brown University (Center for the Study of Human Development), United States

Dr. Helga R. Gudmundsdottir, Iceland University of Education, Iceland

Madame Nathalie Henrich, Centre national de la recherché scientifique CNRS (Département des sciences l’homme et de la société), France

Prof. David B. Huron, Ohio State University (School of Music), United States

Dr. Michael E. Lantz, University of Prince Edward Island (Psychology), Canada

Ms. Theresa A. Leonard, The Banff Centre (Music and Sound), Canada

Dr. Psyche Loui, Harvard University (Harvard Medical School), United States

Dr. Brian J. MacWhinney, Carnegie-Mellon University (Psychology), United States

Dr. Esther Ho Shun Mang, Hong Kong Baptist University (Music), China

Dr. Jean Mitchell, University of Prince Edward Island (Sociology and Anthropology), Canada

Prof. Caroline Palmer, McGill University (Psychology), Canada

Prof. Richard Parncutt, Karl-Franzens Universitat Graz (Faculty of Liberal Arts), Austria

Dr. Leslie S. Phillmore, Dalhousie University (Psychology), Canada

Dr. Janice Richman-Eisenstat, University of Manitoba (Faculty of Medicine), Canada

Dr. Joan C. Russell, McGill University (Integrated Studies in Education), Canada
Prof. Gottfried Schlaug, Harvard University (Harvard Medical School), United States

Dr. Sid-Ahmed Selouani, Université de Moncton (Campus de Shippagan), Canada

Ms. Sung-Ha Shin-Bouey, University of Prince Edward Island (Music), Canada

Prof. Stefanie Stadler Elmer, University of Zürich (Institute of Psychology), Switzerland

Dr. Mira T. Sundara Rajan, The University of British Columbia (Faculty of Law), Canada

Dr. Johan E.F. Sundberg, Royal Institute of Technology (Speech, Music and Hearing), Sweden

Dr. Sten Ternström, Royal Institute of Technology (Speech, Music and Hearing), Sweden

Prof. Caroline Van Niekerk, University of Pretoria (Music), South Africa

Ms. Coralie Vincent, Centre national de la recherché scientifique CNRS (LPP – Laboratoire de Phonétique et Phonologie), France

Dr. Bradley W. Vines, Department of Psychiatry, UBC, Vancouver BC

Prof. Jiaxing Xie, China Conservatory (Chino Music Research Institute), China

Partner Representatives

Anne Allan, Confederation Centre of the Arts, PEI Canada

Caitlin Cambell, Roland Canada Ltd., British Columbia

Corrine Hendricken-Eldershaw, The Alzheimer Society of Prince Edward Island

Steven Horne, Confederation Centre of the Arts, PEI

Mike MacAdams, Extemporal Inc., PEI

Marilyn McQueen, Grand Avenue Children’s Center, London, Ontario

Maxine Miska, Soloway Jewish Community Centre, Ottawa, Ontario

Rob Oakie, Music Prince Edward Island

David Pedlar, Veterans Affairs, Canada

Julia Pike, PEI Cultural Human Resources Sector Council

Lee Willingham, Wilfred Laurier Centre for Music and Community, Ontario Canada
AIRS

Program & Abstracts

Advancing Interdisciplinary Research in Singing Development, Education and Wellbeing

SSHRC
Major Collaborative Research Initiative (MCRI)

3rd Annual Meeting & International Conference
July 9-11, 2011
Memorial University

In Conjunction with

Festival 500: Sharing the Voices
Phenomenon of Singing VIIIth International Symposium &
The International Council of Traditional Music
St. John’s, Newfoundland & Labrador
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21. *Memory for melody in children with Specific Language Impairment*
   Amy Fancourt

22. *Vocal sensorimotor development and singing in first graders: examining the relationship between vocal production and perception using the Vocal Auditory Motor Developmental Assessment (VAMDA).*
   Rayna Friendly, Jennifer Walsh, Christine D. Tsang, Laurel J. Trainor

23. *Movement, mimicry and emotion in song*
   Frank A. Russo

23. *Efficacy of speech vs. song to regulate stress in 10-month-olds*
   Niusha Ghazban, Sandra Truhub, Frank Russo

24. *Sing to me please, put me at ease: infants’ responses to infant-directed singing and speaking*
   Patricia A. Brosha, Petra Hauf

   Mike Forrester, Jessica Baker, Emma Borthwick-Hunter

27. *Does accuracy of singing the major triad predict accuracy of contour production in an unfamiliar song?*
   Bing-Yi Pan, Annabel J. Cohen, Leah Stevenson

28. *Improvisations of Estonian children*
   Marju Raju, Jaan Ross

29. *Traditional children’s songs of the Wagogo of Central Tanzania*
   Kedmon Mapana

30. *Developing musical arts education in remote indigenous Australia*
    Dr. Andrea Emberly, Jane Davidson

31. *Children singing online: An examination internet-based resources*
    John Christopher Roberts

32. *Crisis and curriculum: A philosophical examination of recent literature on male choral singing*
    Jason Noble, Carol Beynon
What do students expect from a singing lesson?  
Dr. Jaan Ross, Vaike Kiik-Salupere

The benefits of singing on second language learning  
Arla Good

Sing a song or read along  
Robyn Wells, Sarah Drake, Jennifer Sullivan

The effects of singing on the acquisition of a novel language  
Henrietta Lempert, Wendy Xin

Fostering understanding in society: ateete, an arsi oromo women’s musical ritual in Ethiopia  
Leila Qashu

Healing and mantra: Background and research  
Hans Utter

Kenya case study: National Boys Choir, school singing, Laipikia  
Jim Sparks

Caregiver measures for singing-related behaviour change in a dementia population: A pilot study  
Sally Busch, Carina Daugherty, Mary Gick

Singing improves self assessed intelligibility in people with PD  
Merrill Tanner, Lili Liu, Leonard Ratzlaff, Melanie Campbell, Linda Rammage

Qualitative research interviews about singing: first experiences  
Marya Stonehouse, Katie McCaw, Jennifer Nicol

EVENING CONCERT PROGRAM

ARTIST BIOS

AIRS SONGBOOK

We Are One
Viva la musica
Namana Karu Main
Raga Khamaj
Cibula Iye, Cibula
Simama Kaa, Ruka
Noponkhola
One Voice
Vindum, Vindum, Vefjum Band
AIRS Round

AIRS ANNUAL REPORTS – YEAR 1

Sub-theme 1.1 “Production and Perception”  
(Prepared by C.D. Tsang)
Sub-theme 1.2 “Multimodal Analysis”  
(Submitted by Dr. Frank Russo)

Sub-theme 1.3 “AIRS Test Battery”  
(Submitted by Dr. Annabel Cohen)

Sub-theme 2.1 “Learning to Sing Informally”  
(Submitted by Dr. Patricia Campbell)

Sub-theme 2.2 “Formal Training in Singing”  
(Submitted by Darryl Edwards)

Sub-theme 2.3 “Learning Through Singing”  
(Andrea Rose and Jennifer Sullivan)

Sub-theme 3.1 “Intercultural Understanding”  
(Submitted by Dr. Godfrey Baldacchino)

Sub-theme 3.1 “Intercultural Understanding”  
(Submitted by Dr. Lily Chen-Hafteck)

Sub-theme 3.2 “Intergenerational Understanding”  
(Submitted by Dr. Rachel Heydon)

Sub-theme 3.3 “Singing and Health”  
(Submitted by Dr. Jennifer Nicol)

Sub-theme “Students and Young Professionals”  
(Submitted by Andrea Emberly)
Welcome

It is a great pleasure to welcome the AIRS Research Team to the 3rd Annual Meeting and International Conference held this year in St. John’s Newfoundland, in conjunction with Festival 500 Sharing the Voices, and The Phenomenon of Singing Symposium VIII. Our conference also coincides with the meeting of the International Council of Traditional Music. We have much to celebrate and much to accomplish in an intensive program of activities spanning July 9 to 13. Our gathering of experts uniquely addresses our three research themes: how singing develops in every individual, how to teach singing and how singing can be used to teach, and finally, how singing can enhance well-being of individuals, groups, and societies.

This extraordinary meeting culminates from the co-operation and hard work of many individuals beginning over three years ago with the collaborators who helped to create a winning proposal to the Social Sciences and Humanities Research Council (SSHRC) Major Collaborative Research Initiatives (MCRI) Program in 2008. SSHRC’s MCRI program provides the outstanding opportunity of planning for the long term and encourages working across disciplines. We remain grateful to the SSHRC Committee members and international external reviewers who saw merit in our proposal.

A strong home base of support at UPEI was necessary for success in such a competition and the support of Dean of Arts Richard Kurial, Vice President of Research and Development Katherine Schultz, and President Wade MacLauchlan is acknowledged. The home team of collaborators at UPEI, from the disciplines of Music, Education, Island Studies, Sociology and Anthropology and the Library provided a foundation, which continues to grow. Gratitude must also be expressed to the partners who have offered to share responsibility in the support of this project. Each developed a formal letter of support for the AIRS project by the Labour Day weekend of 2008. Since 2009, I have appreciated the support of Deborah Annear as Project Manager-Finance, assisted by student Kristin MacDonald, and of Jonathan Lane, Technical Co-ordinator, Dale Sorensen, communications officer, Denise Beaton, assisting with conference co-ordination.

Almost three years ago we dreamed of coming together to advance interdisciplinary research in singing. This dream became a reality. The annual reports from the Research Teams, found in this Program Booklet, reveal that AIRS is breaking new ground in understanding how we learn to sing, how we can teach singing and teach through singing, and how we can improve lives of individuals and societies. As few highlights:

- The new VAMDA assessment tool for visual, auditory, and motor perception/production aspects of development of singing examines benefits of music training in children (Theme 1.1)
- Tests of audio and audiovisual models for vocal reproduction of musical intervals (Theme 1.2)
- AIRS Test Battery data acquired from several countries, age groups and cultures (Theme 1.3)
- Reviews of song collections of children in several cultures available on the Internet (Theme 2.1)
- Initiation of DVD collection of formal voice training (Theme 2.2)
- Examination of the role of singing on vocabulary acquisition in preschoolers (Theme 2.3)
- New Edited Book: Island Songs (28 articles in press) and creation of a Grade V Curriculum and associated Songbook for investigating singing and cultural understanding Theme 3.1
- Piloting a new Intergenerational singing programs and curriculum (Theme 3.2)
- Literature reviews of singing and well-being published and in press(Theme 3.3)
These are but a few of the many accomplishments in just over two years of activity. The AIRS researchers are sharing their knowledge with, and appreciating the knowledge of each member of our network. It is our strength and challenge to work across disciplines and cultures. In St. John’s we will reflect on our goals as we work hard and play hard together, not only at our Annual Meeting but in the opportunities that arise through the remainder of the week at Festival 500, and the Phenomenon of Singing Symposium. We look forward also to participating in the program of July 13 which includes the International Council of Traditional Music.

The AIRS collaborators have come to St. John’s from far and wide including 8 Canadian provinces, and Brazil, China, Estonia, Great Britain, Kenya, and United States with representation also from Ethiopia, India and Tanzania. The new AIRS travel policy provided support for students from all 9 research sub-themes. As well the AIRS student support program has funded research of students in each of the themes. While the majority of those supported are from Canada, students including recent post-doctorates, from other countries add their perspectives. Acknowledgement is due to Andrea Emberly and Rayna Friendly for organizing the Student and Young Professional Group and the first student Newsletter.

Special recognition is directed to the AIRS Steering Committee: Frank Russo representing Theme 1 Development, Patricia Campbell representing Theme 2 – Education, and Jennifer Nicol representing Theme 3 – Well-being (with Mary Gick kindly taking on the position for Year 3) for their tireless efforts in monthly or bimonthly meetings. This Committee has developed policy and steered the course of AIRS enabling the progress of all. The remaining team leaders and co-leaders of the research sub-themes also deserve much praise for the advances each has made with their group, including involving student researchers in accomplishing the milestones one-by-one laid out to September, 2012, now just over 1 year away. AIRS benefits greatly from participation of the Research Team leaders and co-leaders in the Policy and Planning Committee which represents all facets of the project. A full meeting of this Committee precedes the AIRS Annual Meeting and will help to set the course for the year ahead. We are grateful for the participation and assistance of the AIRS Advisory Board: Dr. Philip Smith, Dr. Hilary Apfelstadt and Dr. Kate Stevens and appreciate the presence of Dr. Smith and Apfelstadt at the St. John’s meeting.

The first morning of our Annual Meeting is devoted to an overview of the work of all of the Themes and Sub-themes with an opportunity for all members a Theme to meet together. The Technical Program on the second day of the conference is replete with exciting new work representing all 9 sub-themes plus the digital library group. The evening concert entails the participation of collaborators and students who will share songs in many styles and from many cultures. Throughout the entire meeting, opportunities to sing will remind us of the wonders of the activity that brings us all together from both an academic and phenomenal standpoint.

To each of the many players in the AIRS project: welcome, thank you, and I wish you a most stimulating and fruitful time at this third AIRS International Conference. Our work is bearing fruits of the gifts we have been given.

Annabel J. Cohen
Director and Principal Investigator
AIRS SSHRC MCRI
AIRS 3rd Annual Meeting and Technical Program Schedule

Saturday, July 9
(Pre-Conference)

9:00 am – 5:00 pm

AIRS 3.1 Workshop: Education Building – Room 5004/5

International Research Project on Singing and Cultural Understanding:
Focus on Children in Brazil, Canada, China, & Kenya

Organized by Lily Chen-Hafteck, assisted by Nancy Gleason, with participation by AIRS awardees from each country. Other students, AIRS co-investigators, Phenomenon of Singing delegates or other interested parties are welcome to sit in. There will be one break for lunch. Please contact Dr. Chen-Hafteck lhafteck@kean.edu for further information regarding content, or Deborah Annear dannear@upei.ca for practical information.

Workshop Schedule

8.30 am Breakfast (University Residence)
9:45 am Introductions – Team
Overview of AIRS & Subtheme 3.1 Cultural Understanding – Dr. Lily Chen-Hafteck
• Research Plan & Schedule
• Data collection and analysis processes
10:30 am Research Methodology Seminar – Dr. Patricia Campbell
• Issues on teaching and learning multicultural songs
• Interview technique
11:00 am Teaching of Songs & Presentation of Cultural Information:
• China – Bing-Yi & Yue
• Canada – Arla & Kelly
12:15 pm Lunch Break
1:15 pm Teaching of Songs & Presentation of Cultural Information:
• Brazil – Angelita & Zuraida
• Kenya - Elizabeth
2.45 pm Take Additional Demonstration Video
• Each researcher will demonstrate their songs phrase by phrase (words & melody)
3.30 pm Review and Edit Songbook, Powerpoint, Demonstration Video & Questionnaire – Team
4.30 pm Introduction to AIRS test battery – Dr. Annabel Cohen
4.40 pm Prepare for Presentation at the Phenomenon of Singing Symposium
• Each presenter must choose one easy song with interesting cultural background from their country
5:00 pm Wrap-up and Next Steps
(Group continues to meet throughout the week).
6:00 pm – 9:00 pm  AIRS Policy and Planning Committee Meeting

Location: Education Building – Room 5004/5

Attendees: Theme leaders, sub-theme leaders, committee chairs, advisory board and director and senior executive

*Hilary Apfelstadt, AIRS Advisory Board
*Philip Smith, AIRS Advisory Board
Kate Stevens, AIRS Advisory Board

AIRS Policy and Planning Committee
*Christine Tsang, Co-leader 1.1
Laurel Trainor, Co-leader 1.1
*Frank Russo, Co-leader 1.2 and Theme 1 Leader (Steering Committee)
*Sandra.Trehub@utoronto.ca
*Annabel Cohen, leader 1.3 and Director (Steering Committee)
*Patricia Campbell, Leader 2.1 and Theme 2 Leader (Steering Committee)
*Carol Beynon for Darryl Edwards, Leader 2.2
*Jenny Sullivan Co-leader 2.3
*Andrea Rose, Co-leader 2.3
*Mary Gick, Theme 3 Leader (Steering Committee)
*Lily Chen-Hafteck Co-leader 3.1
Godfrey Baldacchino, Co-leader 3.1
Rachel Heydon, Leader 3.2 (represented by Carol Beynon)
Jennifer Nicol, Leader 3.3
*Jonathan Lane, facilitator Digital Library
Ichiro Fujinaga, Co-leader Digital Library
George Tzanetakis, Co-leader Digital Library
*Rayna Friendly, Student Young Professional Group
*Jaan Ross, Global Group
*Lee Willingham, Partner
*Deborah Annear, Administrative Project Manager (Finance) ex officio
*Bing-Yi Pan, AIRS Postdoctoral Fellow ex officio

*Attending Annual Meeting and Policy and Planning Committee Meeting

Agenda: focus on milestones, mid-term review, and effective annual meeting

Dessert and coffee/juice will be served
## AIRS 3rd Annual Meeting
### Sunday July 10, 2011

All AIRS events Sunday take place in the Education Building, Room 5004/5  
Memorial University

### 8:30 – 9:00  
**Registration/ Coffee**  
pick up materials and name tags  
Posters can be placed

### 9:00 – 9:15  
**Welcome, introductions, group singing, and goals of the meeting**  
Annabel Cohen – AIRS Director (3 min)  
Andrea Rose – Co-Convenor Festival 500/ Phenomenon of Singing (3 min)  
Sing together (3 min)  
Hilary Apfelstadt - AIRS Advisory Board Member (3 min)  
Philip Smith – AIRS Advisory Board Member (3 min)

### 9:16 – 11:00  
**AIRS overview – Orientation**  
Annabel Cohen (4 minutes)

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<th>Time</th>
<th>Section</th>
<th>Presenter/Leader/Group</th>
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<td>9:20</td>
<td>Development: Leader Theme 1 Frank Russo</td>
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<td>Discussion – (6 min)</td>
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<td>9:42</td>
<td>Education: Leader Theme 2 Patricia Campbell</td>
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<td>2.1, 2.2, 2.3 (sub-theme leaders – 4 minutes each total 12 minutes)</td>
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<td>Wellbeing: Theme 3 Leader Mary Gick</td>
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<td>3.1 Lily Chen-Hafteck</td>
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<td>3.2 Zheng Zhang for Rachel Heydon</td>
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<td>3.3 Marya Stonehouse and Katie McCaw for Jennifer Nicol</td>
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<td>Discussion – (6 min)</td>
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<td>10:26</td>
<td>Digital Library – brief update/demo – Jonathan Lane/Theresa Leonard</td>
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<td>10:40</td>
<td>Student-Young Professional Group – Rayna Friendly</td>
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<td>AIRS Partners - Lee Willingham</td>
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<td>10:54</td>
<td>Global Group – Jaan Ross</td>
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<td>10:57</td>
<td>Ethics, Statistics and Intellectual Property</td>
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11:00 – 11:20 Coffee break and posters

11:20 – 12:00 Themes breakout (separate discussion for Development, Education and Well-being focusing on fundamental questions presented to each theme in advance)

12:00 – 1:15 Lunch and viewing posters

1:15 – 1:45 a) Summary of Theme Breakout Group Discussions from the themes leaders

Frank Russo - Theme 1 (3 min)
Patricia Campbell Theme 2 (3 min)
Mary Gick Theme 3 (3 min)

(9 min)

b) Open discussion on links across themes and sub-themes (20 min)

2:00 – 4:00 D. F. Cook Recital Hall (MU-1045) School of Music
Opening Session - Phenomenon of Singing International Symposium VIII (PSIS)

Plenary I - Welcome & Introductions: Andrea Rose and Ki Adams

Cameo Performance: Shallaway Jubilate Choir (Kellie Walsh, conductor)

Bob Chilcott (UK) Text and Cultural Memory: How these relate to our perception of song

4:00-5:00 Opening Wine and Cheese Reception for Phenomenon of Singing International Symposium VIII - MUN School of Music Lobby

5:00 – 6:00 AIRS Test Battery Workshop MU-1032 School of Music
AIRS Test Battery – Reviewing each of the 11 components and finalizing the protocol: Jennifer Sullivan (Nova Scotia), J. Ross and M. Raju (Estonia), M. Forrester, J. Baker, E. Borthwick-Hunter (UK), B. Illari (Brazil/USA) and A. Cohen (chair) assisted by B. Pan & J. Lane (PEI) – All welcome

3.1 students from the 3.1 Cultural Understanding project are also encouraged to attend (extend discussion over dinner for those who wish).

6:00 -8:00 Dinner on your own opportunity to” synergize” with AIRS members who you do not know. Sign-up sheet will be available for those who wish to join a cross-theme group.

8:00- Optional Concert at the Arts and Culture Centre

Rajataon – Indonesian Children and Youth Choir (tickets must be purchased)
Monday, July 11
AIRS Technical Program of the AIRS Annual Meeting

Overview/Summary for July 11
(all events in ED2030B but Plenary II, AIRS Concert and Banquet)

8:30 – 9:15 Plenary II PSIS - Kate Munger (USA) Recital Hall
9:25 – 10:40 Talks: Theme 1 presentations on sub-themes 1.1 1.2, 1.3 Junior Common Room
10:40 – 11:00 Nutrition break and posters
11:00 – 12:00 Talks: Theme 2 - subthemes 2.1, 2.2, 2.3
12:00 – 1:30 Lunch – Posters – Synergies: Theme 1 and 2
1:30 – 3:15 Talks: Theme 3 (3.1, 3.2, 3.3)
3:15 – 3:30 Nutrition break
3:30 – 4:30 Discussion – Synergies with Theme 3
4:30 – 4:45 Time for closing up other loose ends
5:00 – 6:00 AIRS Vocal Concert of wide variety, PC Hall
6:30 – 8:30 AIRS “banquet” at India Gate. more song and final resolutions
9:00 – 10:00 Amabile Choir (of Carol Beynon) at Gower Street United Church

Technical Program with titles of presentations and authors
(Titles and Authors – detailed abstracts and bios follow)
Monday, July 11 Location: ED2030B

8:30 – 9:15 Plenary II (D.F. Cook Recital Hall)
Kate Munger (USA), Threshold Choir: Kindness made audible

9:30 - 10:40 AIRS THEME 1: SINGING AND DEVELOPMENT ED2030B

NOTE: ORAL PRESENTATION ARE LIGHTNING TALKS AND OF NO MORE THAN 12-15 MINUTES
POSTERS ARE LISTED WITH THEIR SUB-THEME BUT WILL BE VIEWED AT LUNCH OR BREAKS

1.1 PERCEPTION AND PRODUCTION — INTER-RELATIONS

9:30 – 9:45
Rayna Friendly (McMaster University), Jennifer Walsh (McMaster University), Christine D. Tsang (Huron University College), Laurel J. Trainor (McMaster University, Rotman Research Institute) friendr@mcmaster.ca

Vocal Sensorimotor Development and Singing in First Graders: Examining the relationship between vocal production and perception using the Vocal Auditory Motor Developmental Assessment (VAMDA).
Posters

- **Amy Fancourt** (Goldsmiths, London)  a.fancourt@gold.ac.uk
  Memory for melody in children with Specific Language Impairment

1.2 MULTIMODAL (AUDIO, VISUAL, AND MOTOR)

9:45-10:00

**Frank A. Russo** (Ryerson University)  russo@ryerson.ca
Movement, Mimicry and Emotion in Song

Poster

**Niusha Ghazban** (Ryerson University), **Sandra Truhub** (University of Toronto at Mississauga), **Frank Russo** (Ryerson University)  nghazban@psych.ryerson.ca
Efficacy of Speech vs. Song to Regulate Stress in 10-Month-Olds

Poster

**Patricia A. Brosha** (St. Francis Xavier University), **Petra Hauf** (St. Francis Xavier University)  x2008kgd@stfx.ca
Sing to Me Please, Put Me at Ease: Infants' Responses to Infant-Directed

1.3 AIRS TEST BATTERY

10:00 – 10:15

**Marju Raju** (Estonian Academy of Music and Theatre), **Jaan Ross** (Estonian Academy of Music and Theatre)  marju.raju@gmail.com
Improvisations of Estonian children

10:15 – 10:30

**Bing-Yi Pan** (University of Prince Edward Island), **Annabel J. Cohen** (University of Prince Edward Island), **Leah Stevenson** (University of Prince Edward Island)  bpan@upei.ca
acozen@upei.ca
Does accuracy of singing the major triad predict accuracy of contour production in an unfamiliar song?

Poster

**Mike Forrester** (University of Kent), **Jessica Baker** (University of Kent), **Emma Borthwick-Hunter** (University of Kent)  m.a.forrester@kent.ac.uk
Mapping out young children's singing: Preliminary English Data

10:30 – 10:40

General Discussion Theme 1

COFFEE BREAK 10:40 – 11:00
2.1 LEARNING TO SING NATURALLY
11:00 – 11:15
Kedmon Mapana (Seattle Pacific University) mapank@spu.edu
Traditional Children's Songs of the Wagogo of Central Tanzania

11:15 – 11:30
John Christopher Roberts (University of Washington) cr777@uw.edu
Children Singing Online: An Examination Internet-Based Resources

2.2 TEACHING SINGING IN FORMAL SETTINGS INCLUDING FOCUS ON LIFESPAN
11:30 -11:45
Jason Noble (The University of Western Ontario), Carol Beynon (The University of Western Ontario) beynon@uwo.ca
Crisis and Curriculum: A Philosophical Examination of Recent Literature on Male Choral Singing

11:45-12:00
Jaan Ross (Estonian Academy of Music and Theatre), Vaike Kiik-Salupere (Estonian Academy of Music and Theatre) jaan.ross@ut.ee
What do students expect from a singing lesson?

Poster
• Hans Utter (Ohio State University) and Utpola Borah utpola@gmail.com
Teaching and Learning Vocal Music in Contemporary India

2.3 TEACHING THROUGH SINGING
12:00 – 12:15
Robyn Wells (St. Francis Xavier University), Sarah Drake (St. Francis Xavier University), Jennifer Sullivan (St. Francis Xavier University) jfsulliv@stfx.ca
Sing a Song or Read Along

Posters
• Henrietta Lempert (University of Toronto), Wendy Xin (University of Toronto) lempert@psych.utoronto.ca wendy.xin@utoronto.ca
The Effects of Singing on the Acquisition of a Novel Language Presentation format: Poster
• Arla Good (Ryerson University) agood@psych.ryerson.ca
The benefits of singing on second language learning

12:15 –12:25 DISCUSSION OF THEME 2

12:30 - 1:45 LUNCH

POSTERS AND TABLE DISCUSSION – SYNERGIES BETWEEN THEME 1 AND 2
3.1 SINGING AND WELL-BEING: CROSS-CULTURAL UNDERSTANDING

2:00 – 2:15
Leila Qashu (Memorial University of Newfoundland)  l.qashu@mun.ca
Fostering Understanding in Society: Ateete, an Arsi Oromo Women’s Musical Ritual in Ethiopia

2:15 – 2:30
Lily Chen-Hafteck (Kean University) and 3.1.1 4-country songsters – teach a song from Brazil, China, Canada or Kenya, from the singing and cross-cultural understanding project

2:30 – 2:45
Jim Sparks (Simon Fraser University)  jaz24@shaw.ca
Kenya Case Study: National Boys Choir, School Singing, Laikipia

3.2 SINGING AND WELL-BEING: INTERGENERATIONAL UNDERSTANDING

Posters
- Zheng Zhang & Rachel Heydon (University of Western Ontario, London, Ontario) Intergenerational curricula, multimodal communication, and identity options: Findings from a study of an IG art program as a basis for a study of IG singing curricula
- Rachel Heydon & Carol Beynon (The University of Western Ontario) and Dr. S. O’Neill (Simon Fraser University)
  The Development of an Intergenerational Singing Program

3.3 SINGING AND WELL-BEING: HEALTH

2:45 – 3:00
Merrill Tanner (Glenrose Rehabilitation Hospital/ University of Alberta), Lili Liu (University of Alberta), Leonard Ratzlaff (University of Alberta), Melanie Campbell (University of Alberta), Linda Rammage (University of British Columbia)  merrillt@ualberta.ca
Singing Improves Self Assessed Intelligibility in People with PD

Posters
- Sally Busch (Carleton University) Carina Daugherty (Carleton University), Mary Gick (Carleton University)  ssimso6@connect.carleton.ca
  Caregiver Measures for Singing-Related Behaviour Change in a Dementia Population: A Pilot Study
- Marya Stonehouse (University of Saskatchewan), Katie McCaw (University of Saskatchewan), Jennifer Nicol (University of Saskatchewan)  mri.stonehouse@gmail.com
  Qualitative Research Interviews about Singing: First Experiences
- Hans Utter (Ohio State University)
  Healing and Mantra

3:00 –3:15 DISCUSSION OF THEME 3

3:15 – 3:35 Nutrition break
3:35 - 4:30 Discussion: SYNERGIES BETWEEN THEME 3 AND THEME 1 AND/OR 2

4:30 - 4:45 Closure: resolutions, summary comments and final remarks from the AIRS steering committee (Frank Russo - Theme 1, Patricia Campbell Theme 2, & Mary Gick - Theme 3) and Annabel Cohen, AIRS Director

5:00 - 6:00 AIRS CONCERT (MUN Music Building - Petro-Canada Hall)
Hosted by - Patricia Campbell

AIRS Vocal Variety Concert including

Kedmon Mapana
Jennifer Sullivan
Merrill Tanner
Jim Sparks
Christopher Roberts
eXtras
The AIRS Quad-Country Songsters
Sally Busch
and more

with kind assistance offered at the piano from pianist Rena Sharon, Artistic Director of VISI

6:20 - 8:30 AIRS “BANQUET”
INDIA GATE RESTAURANT
286 Duckworth St.
9:00 Concert – including Amabile Choir (director Carol Beynon)

Gower Street United Church
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<tr>
<th>Time</th>
<th>Event Description</th>
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<tr>
<td>8:30 – 9:15</td>
<td>PLENARY IV Phenomenon of Singing Symposium</td>
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<td>SCOTT McCoy (USA) – Teaching men to sing: Challenges in the Studio and Rehearsal</td>
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<td>9:30 – 10:30</td>
<td>AIRS Workshop</td>
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<td>AIRS Digital Library - location TBA</td>
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<td>11:00 – 12:00</td>
<td>Phenomenon of Singing Symposium</td>
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<td>(MU1032 - Hilary Apfelstadt, Susan Knight)</td>
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<td>(Petro-Canada Hall - Sally Busch &amp; Mary Gick/ Sheri Cook-Cunningham)</td>
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<td>12:00 – 1:30</td>
<td>AIRS Test Battery/Digital Library working lunch - location TBA</td>
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<td>Or</td>
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<td>1:30 - 2:15</td>
<td>Plenary V Phenomenon of Singing</td>
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<td>Mark Anthony Carpio (Philippines) Making a better world: A singing nation’s journey</td>
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<td>2:30 – 3:30</td>
<td>Phenomenon of singing symposium</td>
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<td>4:00 – 5:30</td>
<td>D. F. Cook Recital Hall</td>
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<td>5:00 Lily Chen-Haftoeck, Elizabeth Andango, Bing-Yi Pan, Yue Xiao, and Angelita Broock</td>
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<td>Understanding cultures, singing songs: Let’s learn about Brazil, Canada, China &amp; Kenya</td>
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<td>7:00</td>
<td>Student pizza dinner - location TBA</td>
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Wednesday, July 13  shared day with
the Phenomenon of Singing International Symposium and
the International Council of Traditional Music

Morning  - Phenomenon of Singing International  Symposium

9:30 – 10:15 Plenary VI  (Arts & Culture Centre, main auditorium)
   Lady Cove Choir (Canada)  Our voice: past, present and future

10:45 – 12:15
   MU2025  Singing cultures: Traditions and contexts
         Christopher Roberts
         Martha Gabriel
         Sheila MacKenzie Brown

Lunch  - on your own

Afternoon

Petro-Canada Hall
1:30 – 3:00 pm  AIRS Quad-Plenary
Advancing Interdisciplinary Research in Singing  (AIRS)

Annabel Cohen (University of Prince Edward Island), Frank Russo (Ryerson University) Patricia S. Campbell (University of Washington), Michael Forrester (University of Kent, UK), Bing-Yi Pan (University of Prince Edward Island), Carol Beynon (University of Western Ontario), Andrea Rose (Memorial University of Newfoundland), Jenny Sullivan (St. Francis Xavier University), Mary Gick (Carleton University), Lily Chen-Hafteck (Kean University), Jonathan Lane (University of Prince Edward Island)

3:00 – 3:15  Break

   1)  Lee Willingham & Debbie Lou Ludolph
       Sing fires of justice: A model for a choral event that creates a community for a cause

4:30 – 5:30  Closing Plenary (PC Hall)
6:00 – 7:30  Closing Hot Buffet Reception (Delta Hotel)
8:00 pm:  Grande Finale Concert  (Mile One Stadium)
After –Party  (Delta Hotel)
Theme 1 Development

Amy Fancourt (Goldsmiths, London)  a.fancourt@gold.ac.uk
Memory for melody in children with Specific Language Impairment

Presentation format: Poster
Sub-themes: Development 1.1

Specific Language Impairment (SLI) is a developmental language disorder that is also associated with cognitive impairments at the level of short-term and working memory (Archibald & Gathercole, 2006a). Children with SLI demonstrate difficulties memorising rote sequences of digits or words (Fazio, 1997). However, it is not yet known whether these deficits generalise to memorising sequences of tones in the musical domain. Those diagnosed with SLI are at risk of poor academic, educational and psychosocial outcomes (Conti-Ramsden, 2009). Singing has the potential to be used as an intervention to improve psychosocial outcomes for children with SLI. However, we first need to consider the extent to which the cognitive impairments implicit in the syndrome may impact upon memory for melody.

Method: Seven children diagnosed with SLI (6-10-yrs, Mean age 8) were required to make same/different judgments about pairs of novel tone sequences ranging between 2 and 5 tones in length. The ‘different’ pairs were manipulated across two conditions. In condition one, the melodies varied at a global level, in which a displaced relative pitch interval changed the overall shape of the contour. In condition two, the melodies varied at a local level, in which a relative pitch interval was displaced, but the overall shape of the contour was preserved.

Results: Signal Detection Analysis (SDA; Swets & Green, 1966) was carried out for each condition to control for response bias. A paired sample T-test, revealed that discrimination accuracy was significantly poorer when the different pairs were varied at the local (interval) level (M=-16, SD=23.61) vs the global (contour) level (M=66.57, SD=35.95); t(6)=-5.54, p = 0.001. There were no significant differences in the performance accuracy across the different tone sequence lengths.

Discussion: Children with SLI are able to make correct comparisons of novel tone sequences, provided that they differ at a global level, indicating that, as is found in typical adults and infants, memory for melodic contour is cognitively salient in children with specific language impairment. This finding opens the door to the possibility of utilising memory for contour to encourage musical engagement as a potential therapeutic tool for children with SLI.

Amy Fancourt has a BSc Honours in Psychology from The University of Durham, an MSc in Cognitive Neuropsychology from The University of London, Birkbeck College and is currently working towards a PhD in psychology at The University of London, Goldsmiths College. Her research interests include music perception and cognition in children with atypical language profiles.

http://goldsmiths.academia.edu/AmyFancourt
Rayna Friendly (McMaster University), Jennifer Walsh (McMaster University), Christine D. Tsang (Huron University College), Laurel J. Trainor (McMaster University, Rotman Research Institute) friendr@mcmaster.ca

Vocal Sensorimotor Development and Singing in First Graders: Examining the relationship between vocal production and perception using the Vocal Auditory Motor Developmental Assessment (VAMDA).

Presentation format: Short oral
Sub-themes: 1.1: Discovering Universals of Song Acquisition:

Introduction: Although singing is a universal human behaviour, we know very little about its development. Several studies in the music education literature and neuroimaging studies of adult singers indicate that sensorimotor integration of vocal production and auditory perception mechanisms are critical to singing proficiency. These studies also indicate that music training and vocal practice are highly related to singing ability. However, it remains unclear how production and perception mechanisms are affected by these factors, and what role they play in singing development during childhood.

Methods Two classrooms of grade 1 children participated in the study. One group of children received a special music program for one hour per week during the school year, while the other group participated in a traditional music education curriculum. A set of matched auditory perception and vocal production tests (VAMDA) were administered individually to all children: once at the start, and once at the end of the school year. Tests of social competence and cognitive ability were also administered.

Results Testing is still in progress. Preliminary results will be presented at the AIRS meeting. Results will indicate 1) whether children’s singing abilities change substantially over the course of a school year, 2) if the music program facilitates singing ability in comparison to the no program group, and 3) if cognitive level and social competence are related to singing proficiency.

Discussion Using the VAMDA, we hope to be able to provide evidence for the vocal sensorimotor loop model of singing, proposed by Berkowska and Dalla Bella (2009). In this model, several factors contribute to singing proficiency, however how the loop develops during childhood is not well understood. By testing singing, cognitive and social abilities in children both pre- and post-training we hope to be able to provide a more rounded examination of singing development.

Rayna Friendly received her Bachelors in Honors Psychology, with a Minor in Sociology from McMaster University in Ontario, in 2007. During this time, she took on many leadership roles, including acting as an executive member on McMaster’s Psychology and Sociology Societies, as well as President of McMaster’s Vocal Ensemble. Currently, she is a PhD candidate at McMaster in the department of Psychology, Neuroscience and Behaviour. As a member of the Infant Auditory Lab, Rayna works under the supervision of Dr. Laurel Trainor: a leading researcher in the field of auditory development and music cognition and perception. Rayna has been singing in school choirs and small ensembles for over 10 years and is currently a member of McMaster University’s Vocal Ensemble. In her research, Rayna has extended on her interest of the voice, and of singing, by studying the development of voice discrimination during the first year of infancy, as well as the interaction of vocal production and perception in the development of singing ability during childhood. Rayna loves working in a field that allows her to combine her interests of psychology and music, and looks forward to interacting with the many vocal enthusiasts at this year’s upcoming AIRS meeting!
Frank A. Russo (Ryerson University)  russo@ryerson.ca

Movement, Mimicry and Emotion in Song

Sub-themes: 1.2

Movement can be implied in song through pitch movement, tempo, and a range of other variables. Movement can also be observed in song through facial movements and ancillary gestures. Some aspects of implied and observed movements are correlated. For example, the size of an interval is positively correlated with extent of head movement, eyebrow raising and mouth opening. Recent evidence from my lab suggests that observers visually track these observable movements and that they experience spontaneous facial muscle activations that mimic those necessary to execute the movements. I will present a new model of song perception that attempts to integrate these findings. The model suggests that the mimicry of movement in song is an automatic feed-forward consequence of a neural simulation of movement and that mimicry supports emotional understanding as well as predispose the observer to believe in the authenticity of the emotions expressed.

Frank Russo is Associate Professor of Psychology and Director of Psychological Science Training at Ryerson University in Toronto, Canada. After earning his Ph.D. from Queen's University at Kingston in 2002, he completed Post-Doctoral Fellowships in Music Cognition and Hearing Science. In 2006, he founded the Science of Music, Auditory Research and Technology (SMART) lab at Ryerson University. With respect to AIRS, Russo is working on projects spanning all three themes and is leader of Theme 1. Current research outside of AIRS includes projects on vocal emotional communication, multimodal perception, and cognitively based music information retrieval. Previous work includes consultation with U.S. and Canadian Departments of Transportation on locomotive horn effectiveness, and invention of a sensory-substitution technology supporting perception of music by deaf and hard of hearing individuals. Current research funding has been awarded by the National Sciences and Engineering Research Council, Social Sciences and Humanities Research Council, Federal Economic Development Agency for Southern Ontario, and the Ontario Ministry of Research and Innovation.

Niusha Ghazban (Ryerson University), Sandra Truhub (University of Toronto at Mississauga), Frank Russo (Ryerson University)  nghazban@psych.ryerson.ca

Efficacy of Speech vs. Song to Regulate Stress in 10-Month-Olds

Presentation format: Poster
Sub-theme: 1.2

The interaction between a mother and her infant has been described as an intricate ‘dance’ involving coordinated singing and movement. It is widely accepted that infant-directed (ID) speech, characterized
as having higher pitch, slower tempo, and exaggerated intonations, is an effective means of communicating with infants and holding their attention. Infants similarly show a preference and respond to ID singing (Trainor, 1996). In fact, singing is one of the most powerful and universally observed caregiving behaviours and one which mothers intuitively use to change and accommodate their infants’ state (de l’Etoile, 2006; Trehub & Nakata, 2003). While both ID speech and singing appear to be equally successful in modulating infants’ attention and arousal (Nakata & Trehub, 2004), the consequences of maternal speech and singing to regulate stress are less clear. Thus the current study examines infants’ behavioural (gaze, vocalization, facial animation) and physiological responses (heart rate and galvanic skin response), to their mothers’ singing vs speech following an acute stressor. Using the Face-to-Face/Still-Face (FFSF) procedure (Tronick et al., 1978), the mothers and infants engaged in a three stage interaction: 1) Face-to Face playtime, 2) Mother’s display of neutral still-face and, 3) the Reunion phase. The last phase is controlled such that mothers re-engaged with their infants by either singing or speaking. Infants were subjected to four repetitions each of singing and speech conditions for a total of eight trials over a 30-minute session. Although data analysis is still ongoing, it appears that maternal singing provides a form of “homeostasis” in regulating infants’ arousal more effectively than speech.

**Niusha Ghazban** - I worked with Dr. Daphne Maurer as an undergraduate at McMaster University and I am currently in my second year of doctoral studies working with Drs. Jean-Paul Boudreau and Frank Russo at Ryerson University. With over 5 years of research experience examining infants’ cognitive and perceptual processes, I have presented at various professional meetings such as International Conference on Infant Studies (ICIS) and Society for Research in Child Development (SRCD). Under the supervision of Dr. Frank Russo and in collaboration with Dr. Sandra Trehub, the current project submitted for presentation examines the effects of maternal singing and speech on regulation of stress in 10-month old infants. For my doctoral comprehensive, I am conducting a major review paper examining the effects of song and music on regulating stress in infants. The review highlights the notion that music and song are a form of “distal communication” that can modulate arousal and attention when physical proximity to soothe the infant is not possible (e.g., driving in a car). Specifically my project reviews current literature on how these effects can be applied to other special populations such as premature and low-birth weight infants when the natural bond and attachment between them and the caregiver is disrupted. This review as well as the submitted proposal was motivated by my interactions with Drs. Russo and Trehub in the context of AIRS.

**Patricia A. Brosha** (St. Francis Xavier University), **Petra Hauf** (St. Francis Xavier University)
x2008kdg@stfx.ca

**Sing to Me Please, Put Me at Ease: Infants' Responses to Infant-Directed Singing and Speaking**

Presentation format: Poster
Sub-themes: Development - 1.2 - Comparison of Singing and Speaking

Introduction: Previous research suggests that infant-directed singing may be effective for sustaining attention and regulating arousal, while infant-directed speaking may be linked to recruiting attention and efficient learning (Nakata & Trehub, 2004). The present study investigated 17 6-month-old infants’ responses to infant-directed singing and speaking from a standardized, non-maternal source to compare these styles of infant-directed communication.

Method: Using eye-tracking technology and video recording, infants’ looking behaviour and motor behaviour were captured in detail as they watched audiovisual displays of an adult engaging in singing and speaking of a familiar and a novel text.

Results: Findings showed that overall looking time was significantly longer for episodes of infant-directed singing than comparable episodes of infant-directed speaking, which may signal intense engagement. Furthermore, overall looking time was longer for episodes containing a novel text compared to episodes of a familiar text. For specific areas of interest, infants displayed a preference for the mouth region over the eye region regardless of vocal style or text familiarity, possibly reflecting an increasing interest in language. There was no significant difference in infant movement for vocal style or text familiarity.

Discussion: Current findings lend further support to the growing body of knowledge on infant-directed communication, and may have implications for infant learning and adult-infant interaction. Infant-directed singing may promote emotional engagement, while infant-directed speaking may facilitate information processing.

Tricia Brosha recently completed her undergraduate degree this spring at St. Francis Xavier University. She did her Honours in Developmental Psychology, where her thesis research investigated infants’ attentional and behavioral responses to infant-directed singing and speaking, under the supervision of Dr. Petra Hauf, Canada Research Chair. Tricia began her research with AIRS in the summer of 2010 as a summer research assistant in the developmental laboratory of Dr. Hauf, where her primary work focused on the development of an AIRS study using eye-tracking technology with 6-month-old infants. Tricia hopes to attend graduate school in the future, focusing in the fields of early childhood development or clinical child psychology.

Dr. Petra Hauf is a professor of psychology at StFX and a Canada Research Chair in Culture and Human Development. She is a researcher in infant cognitive development focusing on the link between perception and production in cognitive development. She received her doctoral degree from Johann Wolfgang Goethe University in Frankfurt, and previously worked as a senior research scientist at the Max Planck Institute for Human Cognitive and Brain Sciences in Munich, Germany. Prior to coming to Canada, she was an assistant professor of psychology at the University of Frankfurt. Dr. Hauf currently collaborates with numerous research scientists who work at high profile universities and research institutes in North America and Europe. These collaborations include work with Claes von Hofsten at the University of Oslo, Norway, Martin Giese at the University of Tuebingen and Birgit Elsner at Potsdam University in Germany, as well as Renee Baillargeon at the University of Illinois, Champaign-Urbana and Nick Stergiou at UNO, Omaha, USA. In Canada, she works together with Chris Moore at Dalhousie University and Diane Poulin-Dubois at Concordia.
Mapping out young children's singing: Preliminary English Data

Introduction: This poster summarizes our preliminary analysis of the AIRS test battery used with young school-aged children in England (UK). Establishing the early singing skills of young children is a central element of the 'Development' theme in the AIRS project and the data reported contribute towards building up a picture of such skills.

Method: 104 children between the ages of 4 and 9 years were video-recorded using the AIRS test battery profile (12 components). Children were filmed either in a classroom or staffroom context in a relaxed and informal manner. Employing the battery took approximately 15 minutes per child and the data was collected over 3 month period.

Results: Digitization and analysis is currently ongoing and this report describes our preliminary observations. It would seem (a) that there is a clear developmental trend in children's abilities when producing the full vocal range - older children exhibiting a great range; (b) older children also produce more imaginative spontaneous singing when asked; (c) there are indications of gender differences with older age groups - with girls exhibiting more creativity than boys, and (d) there are indications of considerable variability in the singing of the youngest children.

Discussion: The implications of our preliminary findings are considered with reference to contemporary work on young children's singing abilities.

Jessica Baker
BSc Social Psychology degree

Emma Borthwick-Hunter
PhD - Lecturer and Researcher in early child development, musicality and language.
Does accuracy of singing the major triad predict accuracy of contour production in an unfamiliar song?

Presentation format: Short oral Sub-themes: 1.3

The AIRS Test Battery of Singing Skills was developed to provide information on cultural, experiential and universal factors influencing the acquisition of singing. The Battery was recently administered to 32 students at a Canadian University, one half native Chinese, the other, native Canadian. Participants performed the 11 components of the Battery twice. The present analysis examines performance on Component 6 - Musical Elements and Component 9 - Learning an Unfamiliar Song. The 5 musical elements were: first three notes of the major scale, first 4 notes of the major scale, major triad, and ascending and descending major scale. Participants heard a model (sung on the syllable la) and then echoed the example (on la). The unfamiliar melody of Component 9 had 5 phrases in a major key. The English lyrics were translated into Chinese, and one half of each language group of participants was presented with Chinese; the remainder heard English. Regardless of the language of the lyrics, the melody was to be sung back on la in both sessions. Component 6 items were scored by ear on a binary scale; the 5 sung phrases from Component 9 were notated by ear, and their correctness was scored in binary for a maximum score of 10 when collapsed over the 5 phrases and 2 sessions. Correlations were performed between scores for the 5 elements from Component 6 and overall performance of Component 9. Performance on the major triad significantly correlated with ability to sing the contour of the unfamiliar song correctly. This finding is surprising because contour does not require accurate interval representation but accurate singing of the major triad does. We seek further confirmation as we search for common factors which can both explain variation in performance on the AIRS test battery and contribute to the development of a model of acquisition of the skills of singing.

Dr. Bing-Yi Pan received his Ph.D. in physics in 2010 from the Institute of Physics, Chinese Academy of Sciences, Beijing and B.Sc. in physics in 2004 from Shandong University, Jinan. Simultaneously he received his B.A. in music education in 2008 from Central Conservatory of Music, Beijing. Currently, he hold AIRS postdoctoral fellowship at UPEI with Dr. Annabel Cohen, is working on the AIRS Test Battery and also contributing to the Chinese component of the 3.1 project on singing and crosscultural understanding. He is also interested in formal teaching of singing.

Dr. Annabel J. Cohen is the Director of the AIRS MCRI and also leads the AIRS test battery research sub-theme 3.1. She carried out her graduate work in Psychology at Queen’s University, and her undergraduate research at McGill University. She is the Editor of Psychomusicology: Music, Mind & Brain and serves as consulting editor on several other journals. She received her ARCT in voice performance from the Royal Conservatory of Music – Toronto, and is a Fellow of the Canadian Psychological Association. She is a member of Council of the American Psychological Association.

Leah Stevenson I am a UPEI graduate with a BA and an honours degree in Psychology, with my thesis conducted exploring the AIRS test battery with Chinese and English participants. I aspire to be a speech-language pathologist; I am currently doing volunteer work in this field, and plan to continue to do so while traveling in Australia next year.
**Improvisations of Estonian children**

Presentation format: Short oral    Sub-themes: 1.3

AIRS Test Battery was piloted in Estonia with 26 children ages 4-12. This presentation focuses on results from two components of the Test Battery: component 7 (improvising an ending to a melody) and component 8 (improvising melody for picture). Comparing to other components of the Test Battery, improvisational elements seemed to be most challenging for the participants. Improvisational performances are influenced by various aspects. Results depend on different concepts of song in Estonian and language and culture based connotations on singing. In Estonian language, the word “song” does not have a music-specific meaning. For example, for our historical folk songs (regilaul) it is quite common to use same tunes with different lyrics, so the melody carries rather a helpful device for recalling huge amounts of lyrics from memory. Estonian word laul (song) is also used for poems, epic texts or even stories. As we did not asked participants to define “song” or “singing” nor defined the concept ourselves giving the instructions, definition of “song” could therefore be presented as a scale where spoken words are at one end and words sang with melody in other end. The usage of rhythm in the other hand differs as person knowingly “sings” or “talks”. Words (with or without a musical melody) recited in the meaning of singing have stronger rhythmic structure, a beat. If the rhythm or speed for spoken words is recognizably altered, it could be considered as singing. Success for completing improvisational components also depend on child’s overall habitude of testing, willingness to perform this kind of exercises and level of performance anxiety. Prior music education seems to influence structure and harmony of improvisations.

**Marju Raju** is a doctoral student of musicology in Estonian Academy of Music and Theatre. She has a M.Sc. in psychology (2007) from Tallinn University and a master’s degree in musicology (2008) from Estonian Academy of Music and Theatre. She received best student presentation award at AIRS Annual Meeting 2010. Her academic works has been published in Musicae Scintiae, Psychology of Music and Res Musica. Marju Raju is currently employed in civil service. She is working as an analyst at the Ministry of Social Affairs of Estonia where she is responsible for coordination of research projects and conducting analysis on gender related topics.

**Dr. Jaan Ross** studied at the Estonian Academy of Music and Theatre and received his equivalent of M.A. in musicology cum laude in 1980. Later he studied at the Moscow P.I. Tchaikovsky Conservatory and obtained his Ph.D. in musicology at the Lithuanian Academy of Music and Theatre, Vilnius, in 1988. In 1992, he obtained another Ph.D. in psychology at the Abo Academy University, Turku, Finland. His primary research field has been the relationship between music and language, in particular between sounds of music and speech. He is the author of a few monographs or textbooks published in English, Russian or Estonian. In 2003 he was elected a member of the Estonian Academy of Sciences and in 2009 a member of the Executive Council of the European Society for the Cognitive Sciences of Music (ESCOM). He is a member of editorial board of a number of scholarly journals, including *Musicae Scientiae*, *Journal of Interdisciplinary Music Studies* and *Proceedings of the Estonian Academy of Sciences*. He has translated into Estonian or edited translations of books by John Sloboda, Johan Sundberg and Nicholas Cook. He has also translated into Estonian contemporary Russian fiction.
Kedmon Mapana (Seattle Pacific University)  mapank@spu.edu

Traditional Children's Songs of the Wagogo of Central Tanzania

Presentation format: Short oral Sub-themes: Theme 2.1, Learning to sing naturally.

Introduction: The Wagogo people of central Tanzania are a Bantu ethnic group living in rural, pastoral and agricultural communities about 300 miles inland from the Indian Ocean. Most of the children's songs among the Wagogo people are naturally acquired from an enculturation process by which songs are “learned but not taught” (Rice, 1994). As a field researcher with an ethnomusicological perspective, I was graciously accepted by the village community to examine songs of Wagogo children of Chamwino, a village about 300 miles from the capitol city of Dar es Salaam.

Method: Using observation, participant observation, and video: and audio-documentation, data were gathered from 150 children, ages 4 to 12.

Results: Most of the children's songs of the Wagogo people are sung in unison, unaccompanied, and call and response is a formal characteristic of the songs. The focus on singing is a priority for AIRS, but, for the Wagogo children, movement and dance are not separated from the singing. Consistently featured dance movements include the limbs, head and torso. Topics such as family needs, moral issues and birds are evident in the song texts. Also, most of the songs were spoken instead of sung, the use of three to four pitches was common and most of the songs were familiar to me.

Discussion: There is concern about the disappearance of Wagogo children's songs in Chamwino, and of their wholesale abandonment by communities. The Wagogo people, along with many other groups of people in Tanzania, are being swept into more contemporary musical trends to the extent that some are abandoning their interests in long-standing traditional music and dance forms. Based upon my findings in this research project, I recommend the following:

1. AIRS should make these recorded songs available to singers, choir directors, and teachers on the AIRS website, but also to the Wagogo of Dodoma, Tanzania.
2. More research and documentation are needed among the Wagogo people before more of the children's songs are swept away by popular culture. Note that this research was accomplished only in Chamwino village, however, I did not get many songs in this village, and then I had to travel to Kawawa village (approximately 30 miles North from Chamwino).

Kedmon Mapana is on leave as an Assistant Lecturer at the University of Dar es Salaam, Tanzania, Department of Fine and Performing Arts. He earned a Music Education Certificate from Butimba Teachers College, a BA in Music and a Master of Arts in Music from the University of Dar es Salaam. Currently, he is a full-time doctoral student at Seattle Pacific University in curriculum and instruction with emphasis on music education and ethnomusicology. He is a dancer, singer, drummer, Gogo flute, kayamba and ilimba player, music performance organizer, choir director, scholar and community music teacher. In 2006 and 2007, he taught choral and dance workshops in schools and Lutheran churches in Sweden and Denmark. He is featured in a documentary filmed in Denmark in 2008, “Kedmon Mapana in Denmark” (Milbo Media: MM-DOK 44005008). In 2008, he led a group to Wrickaw Poland to perform and give workshops at a cultural festival. He has presented invited academic papers at Africa University in Zimbabwe, University of Washington School of Music, and University of Dar es Salaam’s Ethnomusicology Symposium. He has published an article in the African Cultural Studies Journal. He was a Panelist for Teleconference for the Society of Ethnomusicology Annual Meeting 2008. He has organized three large Wagogo cultural festivals. Recipient of a 2009 fellowship award from Jubilation Foundation. His research during 2010-2011 received supported from AIRS for research on Wagogo children's music. He was a teaching artist for Smithsonian Folkways certification workshops.
John Christopher Roberts (University of Washington)  cr777@uw.edu

Children Singing Online: An Examination Internet-Based Resources

Presentation format: Short oral
Sub-themes: 2.1 Learning to sing naturally

The movement to honor and value children’s voices has gradually gained steam over the last two decades, and the rise of the Internet allows interested parties to not only read about children’s natural musicking experiences, but also to hear children, singing and laughing and engaging in the musical play that is part of the essence of childhood. The current project, supported by AIRS, surveyed available online resources, to determine the scope and variety of websites containing music of children singing in their natural contexts, with minimal interference by adults. Over fifty websites were examined, and five met the criteria: Smithsonian Folkways, the American Folk Song Collection at Holy Names University, the Florida Folklife Project of the Works Progress Administration, The Association for Cultural Equity, and The Archival Sound Recordings of the British Library.

Each website is described, first in broad overview, then with specific sections explaining the overall musical content available on the site followed by particular attention to the musical content of children. Following the description of each website, the transcribed songs from the site are posted, along with relevant information available on the website. Links for all songs are included. After all five sites are described, a classification system is provided. Thirty-four songs are transcribed, representing 15 countries and 23 cultures. Tessituras and ranges vary widely, with the "Inuit Children’s Song" ranging from A, to E while the children on "Trois Fois Passera" from Canada sing notes from A flat to E flat. Most songs fall into duple meter, but the prevalence of asymmetrical or mixed meters can also be found in 12 of the 34 songs. The most common text subject is violence or death, while other topics include animals/nature, food, and work/occupation.

Christopher Roberts is a doctoral candidate in music education at the University of Washington, and teaches music to Kindergarten through fifth graders in Seattle. An active teacher educator, he has taught in the Kodaly Certification Program at Seattle Pacific University since 2000, and has presented sessions for music teachers in 15 states. His articles have been published in the Orff Echo and the Kodaly Envoy, and his chapter in the upcoming publication, "Oxford Handbook of Children’s Musical Cultures" explores the nature of children's natural musickings in three historical field recordings from New York City. In 2009, he was awarded the "Outstanding Research Award – Professional" by the Organization of Kodaly Educators for his article on student attitude towards competitive singing games. Roberts is the former Western II Regional Representative for OAKE, and currently serves as the Northwest Regional Representative of the Society for General Music.
Crisis and Curriculum: A Philosophical Examination of Recent Literature on Male Choral Singing

The word “crisis” is frequently used to describe the state of male participation in choral singing: Dr. Weston Noble has remarked that only 7% of the world’s singers are male, and the numbers have been in decline for over a century. Among the many topics addressed in vast body of literature on choral pedagogy published in the last decade, male choral singing is the most intensively pursued area of research. The widespread absence of males in choirs is perceived as having detrimental effects for the males to whom the great benefits of choral singing are denied, for the tradition of choral music and for society as a whole. Two problems perceived to be unique to males, the dramatic voice change experienced during adolescence and the social barrier of hegemonic masculinity, are cited as sources of the “problem of the missing males.” Proposed solutions have tended to focus on organizational structure, repertoire selection, sound pedagogy and the creation of an inclusive atmosphere. However, in spite of the concerted efforts of researchers and the choral profession, the situation has not appreciably improved. In this paper, we examine the literature to explore this apparent disconnect between theory and practice. Drawing on the work of Ornstein and Hunkins we propose that a confusion of philosophical orientations may be at the root of the problem. Since effecting a curriculum of social change and personal development is the stated goal of the literature, a philosophy of progressivism and reconstructionism should be embraced and expounded. In its current state, however, we feel that the literature does not demonstrate a conscious consideration of curriculum philosophy, and as a result perpetuates elements of perennialist and essentialist thinking that inadvertently facilitate the cultural hegemony that impedes males from singing in choir.

Jason Noble is a composer, arranger, choir director, examiner, singer, pianist and organist. He is a PhD candidate at McGill University, and holds a MMus in composition from The University of Western Ontario and honours degrees in music and philosophy from Memorial University of Newfoundland. His teachers have included Dr. Omar Daniel and Prof. Clifford Crawley. Jason has composed for many of Canada's finest ensembles including Lady Cove, Newman Sound, Shallaway, Amabile Choirs of London, Soundstreams, Esprit Orchestra, Vancouver Chamber Choir, and the Newfoundland Symphony Orchestra. His pieces have been featured on CBC and in concerts across Canada, the United States and Europe. His collection of student piano music 'Sunny Skies and Dragonflies' is published by The Frederick Harris Music Company, and his children's audio book 'The Stupendous Adventure of Gregory Green' is published by Boulder Publications. Jason's many years as a chorister and choral composer give him personal insight into the subject of this presentation.
What do students expect from a singing lesson?

A successful singing lesson requires coordinated efforts from the three parties involved: student, teacher, and coach. Results of a survey are reported, where 32 originally developed statements were rated on a 5-point Likert scale by high school students, university students, and professional singers of an opera choir. The statements were related to students’ expectations of their teacher and coach during individual singing lessons. Participants were also able to add their own comments to the questionnaire. One-way ANOVA showed a difference of high school students in comparison with the other two groups. Analysis of responses to the survey demonstrated that (a) the relationship between the teacher, student and coach should be based on partnership, (b) the teacher should be positively minded, have professional skills and up-to-date knowledge, and be able to inspire the student, (c) the coach’s abilities and skills should be at a sufficiently high level, (d) in addition to technical proficiency, the teacher should also develop psychological skills of students helping them to cope with a stress as professional singers. In their free comments to the questionnaire, the five most popular phrases used by respondents turned out to be (1) support of efforts [of the student], (2) understanding, (3) mutual trust, (4) [teacher as] the creator of atmosphere, and (5) positive attitude. Teachers’ nervousness and irritability were described by students as the qualities that should be ruled out in a lesson. Since preparation of students is to a large extent similar in all areas of musicianship, students’ expectations of vocal teachers and coaches are generally expected to be valid also in other fields of training musicians as well. From an even wider perspective, the issues of student-teacher interaction are expected to overlap in all areas that involve learning.

Jaan Ross studied at the Estonian Academy of Music and Theatre and received his equivalent of M.A. in musicology cum laude in 1980. Later he studied at the Moscow P.I. Tchaikovsky Conservatory and obtained his Ph.D. in musicology at the Lithuanian Academy of Music and Theatre, Vilnius, in 1988. In 1992, he obtained another Ph.D. in psychology at the Abo Academy University, Turku, Finland. His primary research field has been the relationship between music and language, in particular between sounds of music and speech. He is the author of a few monographs or textbooks published in English, Russian or Estonian. In 2003 he was elected a member of the Estonian Academy of Sciences and in 2009 a member of the Executive Council of the European Society for the Cognitive Sciences of Music (ESCOM). He is a member of editorial board of a number of scholarly journals, including Musicae Scientiae, Journal of Interdisciplinary Music Studies and Proceedings of the Estonian Academy of Sciences. He has translated into Estonian or edited translations of books by John Sloboda, Johan Sundberg and Nicholas Cook

Vaike Kiik-Salupere obtained her equivalent of M.A. from the Estonian Academy of Music and Theatre in voice studies. Between 1999 and 2005 she performed as a soloist on stage of the Estonian National Opera. Thereafter she received a M.A. in social sciences from Tallinn University. Currently she is a doctoral student at the Institute of Educational Sciences of Tallinn University. She also works as a part-time lecturer at the Institute of Fine Arts of the same university. Her doctoral thesis focuses on problems of voice teaching, in particular on expectations students may have with respect to vocal tuition, including preparation of how to cope with stress when performing on stage. Since 2009, she is a member of the International Society for Music Education (ISME). She has presented a number of papers on international conferences and a few articles in international peer-reviewed journals or books.
Utpola Borah and Hans Utter (Affiliated with Ohio State University)

Teaching and Learning Vocal Music in Contemporary India

Poster 2.2 and 2.1, 2.3 and 3.1 and 3.3

Introduction: The tradition of music education in India (guru/shisya parampara) is currently being supported in a variety of institutional settings. Our poster represents our examination of several examples of this, and highlights the training methods and compare the strengths and weaknesses of various programs with a particular focus on the role of singing or the teaching of singing.

Method: The methods included collecting ethnographic data through interviews and audio/video recordings, participation in learning situations, and examination of data regarding the success rate of various programs. The data on the formal training settings was then compared cross-institutionally and with informal educational settings.

Results: Certain institutions are more suited than others in the production of highly qualified artists and performers. It was found that the preservation of individualized instruction and reliance on oral transmission was superior to a standardized curriculum. However, the assessment of student progress requires standardized assessment tests.

Discussion: For North Indian classical vocal music, the systems of oral transmission and individualized training appears to be necessary for the requires of this art form. However, the balance between individualized instruction and institutional settings is difficult to maintain.

Utpola Borah is an Ethno-musicologist, Educationist and Cultural Archivist and Performer of Hindustani Classical Music. She has made important contributions to the discipline from the time she started her Doctoral research in the University of Delhi. Utpola has done an extensive study on “Bihu songs of Assam” which has found expression In her book, "Bihu Festival of Assam - Music, Dance & Performance” published by B.R. Rhythms, Delhi (2005). Her experience in the Archives and Research Centre for Ethnomusicology (ARCE) has earned her recognition in the field of Ethnomusicology and in other areas of Cultural studies like Folklore, Anthropology and Performing arts of India. Utpola has worked as a Course Writer, Content editor and Expert for the PG Diploma in Folklore and Cultural Studies in the School of Interdisciplinary and Trans-disciplinary Studies at the Indira Gandhi National Open University (IGNOU), New Delhi. She has presented lectures and given demonstrations at International and National seminars and conferences in India and USA. Utpola is aneminent Hindustani (North Indian) Classical vocalist. She has been trained extensively in the traditional "Gurukul" system and is an accomplished performer.

Hans Utter holds a PhD. Ethnomusicology from The Ohio State University. His current research focuses on the Imdad Khan Gharana, including a detailed study of Ustad Vilayat Khan’s sitar and vocal techniques. He has conducted research in cognitive Ethnomusicology on entrainment with non-periodic music. Hans has worked as a lecturer in musicology at Ohio State University, as a course writer, and as a visiting consultant at several universities. The AIRS project parallels his recent research into the neurophysiology of music performance. He is the author of Trance, Ritual, and Rhythm: The Cult of Mahasu Deota in the Western Himalayas (B.R. Rhythms 2010). A disciple of sitarist Ustad Shujaat Khan, he has performed in America, Canada, Europe, and India.
The benefits of singing on second language learning

Introduction: The current study extends to second language learning the popular notion that memory for text can be supported by song. In the context of a second language classroom, singing can be intrinsically motivating, attention focusing, and simply enjoyable for learners of all ages. For native text, the melodic and rhythmic context of song enhances recall of text (Wallace, 1994). However, there is limited evidence that these benefits extend to learning of foreign text.

Method: In this study, Spanish-speaking Ecuadorian children learned a novel English passage for two weeks. Children in a sung condition learned the passage as a song and children in the spoken condition learned the passage as an oral poem. After the third learning session, children were asked to reproduce the passage in the method in which they were taught (sung or spoken) while reading the lyrics and were tested on their ability to correctly pronounce the foreign words. After the fourth session, children were tested on their ability to recall verbatim as many of the words as possible and they were asked to translate 10 target words (or terms) from the passage into Spanish.

Results: As predicted, children in the sung condition demonstrated superior verbatim recall. In addition, their pronunciation of vowel sounds and translation success were enhanced. The benefits of learning through music persevered after a six-month delay.

Discussion: Findings have important implications for second language instruction. The poster will also consider mechanisms such as dual encoding and automatic rehearsal that may be responsible for the gains observed in learning second language through song.

Arla Good graduated from the University of Western Ontario with an honours BA in Psychology. She is currently pursuing her graduate studies in the SMART (Science of Music, Auditory Research, and Technology) lab at Ryerson University with an excitement to combine her knowledge of psychology with her enthusiasm for music. Her past experiences working with children with neurological disorders have lead her to focus her energy researching the many ways music and singing can benefit children.
Introduction: Previous research has shown the positive influence of music on vocabulary development. The current study investigated two vocabulary intervention techniques with pre-school aged children and determined whether singing or storybook reading has a greater effect on the ability to learn new vocabulary.

Method: Eight children from two different daycare centres were assigned to one of two conditions, a singing condition or a storybook condition. All children were pre-tested for their knowledge of 36 vocabulary words using a Picture Vocabulary Test (PVT) developed for this study. Children in each condition received 8 weeks of vocabulary intervention consisting of learning 10 songs or listening to 10 storybooks. Twenty-eight of the target vocabulary words were used in both the stories and songs and two sets of an additional 4 words were only present in each type of intervention. After the intervention, the children were post-tested for knowledge of the same vocabulary words.

Results: As hypothesized, children in the singing intervention showed significantly greater vocabulary acquisition than those in the storybook condition.

Discussion: Singing intervention proved to be a useful way to teach children new words. The intervention was extremely enjoyable for the young children. This is an inexpensive and accessible alternative to storybook reading.

Robyn Wells is a 4th Year Honours Student at St. Francis Xavier University.

Sarah Drake, BA, is a graduate from St. Francis Xavier University with a degree in Psychology.

Dr. Jennifer Sullivan, received her PhD. in Psychology from the University of Waterloo. She has been teaching Psychology at St. Francis Xavier University since 2003.
The Effects of Singing on the Acquisition of a Novel Language

Presentation format: Poster
Sub-theme: 2.3 – Teaching through singing

Even after many years of English immersion, post-puberty L2 learners from a variety of first languages may have great difficulty supplying bound inflectional morphology (e.g. Yesterday, she cook supper; My child like to play; My house has many room). Our research program uses a novel language to investigate whether singing voice presentation enhances perception of inflections as compared to speaking voice presentation. In this poster, we will present our methodology and the results of our pilot study. Our language comes in two versions (dialects), a prefix version ("ohift puser ie vab") and a suffix version ("hifto puser vabie"). The learner must attend to the prefixes/suffixes in order to master the rules of the language (e.g., there can be only one ie-word and one o-word in each sentence). Each language has been recorded in two formats; a) speaking voice (with natural speech prosody cues to the phrase structure) and b) singing voice (in which differences in pitch are cues to the phrase structure). Dialect and format are completely crossed between-participant variables. Participants listen and repeat each study sentence (24 exemplars of legal sentences), following which they judge the acceptability of another 16 legal and 16 illegal sentences. Four cycles of study-test trials are presented, using speaking voice presentation of tests in both formats (in order to confirm that singing voice participants will generalize to speaking voice format). To date, we have data from eight Introductory Psychology research participants (two in each Dialect x Condition cell). It will be possible to add data from an additional 20 students by the end of June, which will give us a sufficiently large sample to discern the effects of our manipulations.

Dr. Lempert runs the Language Cognition lab in the Psychology department of University of Toronto. Her current research focuses on second language acquisition, including syntactic development and speech prosody. She has previously pursued research in the areas of developmental psychology, specifically in first language acquisition.

Wen (Wendy) Xin is an undergraduate student enrolled in the Psychology Research Specialist program at University of Toronto. In addition to being a research assistant in the Language and Cognition lab, she has also worked in memory and visual cognition labs, assisting in a number of studies that involve eyetracking and rodent models of attention and learning. She has had formal musical training, and received the RCM Silver Medal Grade 7 Piano award (Quebec division) in 2004.
Leila Qashu (Memorial University of Newfoundland)  lqashu@mun.ca

Fostering Understanding in Society: Ateete, an Arsi Oromo Women’s Musical Ritual in Ethiopia

Presentation format: Short oral (<20 minutes)
Sub-themes: 3.1

In Arsi Oromo society in Ethiopia, although women have no formal political authority, and are not directly involved in men’s dispute resolution ceremonies, they have religious power that intersects with the political sphere. In the case of gender abuse, when a woman has been dishonoured by another person in any way (verbally, physically or other), she can gather with other women in front of the person’s house to perform a song- and poetry-based ritual called Ateete, at the end of which the offender is expected to confess his guilt, offer a gift and ask for forgiveness. In this paper I will discuss my doctoral research, for which I have been conducting field research in Ethiopia this past year. I will discuss the ritual in detail in order to demonstrate how women teach and remind the men in society how to behave, and how both segments of society learn to understand, apologize and forgive. I will also discuss a cross-cultural case study, in which the ritual was used to resolve a dispute between people of two different ethnic groups. Through video and audio recordings of interviews and descriptions of research on the field, I will present examples of the rituals, the participant’s voices and how they view their rituals in society.

Leila Qashu is a Ph.D. candidate in ethnomusicology a Memorial University of Newfoundland and a Trudeau Foundation Doctoral Scholar. She completed two Master's degrees in ethnomusicology at the University of Paris 8 in France. She has been working on Arsi Oromo music in Ethiopia and conducting fieldwork since 2002, independently and in conjunction with a French research team and the UNESCO - Norway funds-in-trust project on Ethiopian instruments, music and dance.

Hans Utter (The Ohio State University)  hansutter@hotmail.com

Healing and Mantra: Background and Research

Presentation format: Poster
Sub-themes: intercultural understanding (3.1)

Introduction: The chanting of specific sacred sounds, known as mantras, is central to Hindu and Buddhist spiritual and ritual practices. Mantras are utilized for healing and overall well-being.
Method: I will examine the philosophical, psychological, and physiological aspects of mantra within Hinduism. I will explore the health benefits associated with mantra chanting through the analysis of sonic and performative dimensions. Results: I will outline potential research directions which can test the claims of the healing powers of mantras through the both empirical and subjective modalities. Discussion: Sacred sound and chanting are common to many traditional cultures. This study can be utilized in cross-cultural comparisons of chanting, as well as increasing the overall understanding of these practices and potential health benefits.

Hans Utter holds a PhD in Ethnomusicology from The Ohio State University. His current research focuses on the Imdad Khan Gharana, including a detailed study of Ustad Vilayat Khan’s sitar and vocal techniques. He has conducted research in cognitive Ethnomusicology on entrainment with non-periodic music. Hans is a lecturer in musicology at Ohio State University, and has worked as a course writer, and a visiting consultant at several universities. The AIRS project parallels his recent research into the neurophysiology of music performance. He is the author of Trance, Ritual, and Rhythm: The Cult of Mahasu Deota in the Western Himalayas (B.R. Rhythms 2010). A disciple of sitarist Ustad Shujaat Khan, he has performed in America, Canada, Europe, and India.

Jim Sparks (Simon Fraser University) jaz24@shaw.ca

Kenya Case Study: National Boys Choir, School Singing, Laipikia

Presentation format: Other
Sub-themes: 3.1

Introduction: This particular study focus is on singing expression in Kenya and is part of several case studies (Cuba, Ukraine, Denmark) I am conducting in skilled authentic singing. The following questions are explored on the part of choral leader and singer: What are the discernable qualities of expressive singing on the part of the listener and the singer? What value is placed on these qualities in the context of the conductor and singers’ cultural tradition? What are the skills employed in accessing expressive, authentic singing? What is the role of repertoire in the relationship between skill and expression? In what ways is there demonstrated ‘knowledge or ‘way of knowing’ evident in the singing? (Elliot 2005)

Method: The study uses a qualitative, emergent design to build on and extend our understanding of existing theory and practice focused on the interdependent relations between skill an expression in choral singing across different cultural traditions. The aim of the data collection is to build a rich, descriptive account of the complexity of culturally diverse forms of musical expression within the context of specific choral performances. a) Participants: National Boys Choir of Kenya: a) 24 singers drawn from 42 tribes in Kenya: ages 17-23. b) Children from Schools surrounding the Ol Pejeta Conservancy, Nanyuki, Kenya.
b) Procedure: In depth data collection including: field notes of observation and interviews, video footage of singing performances/rehearsals and interviews of conductors and singers through
translation, audio recordings of singing performances and rehearsals, documentation contextualizing the collected data. I also taught Canadian repertoire including the National Anthem to several choirs. Data analysis will involve an inductive, narrative approach and a classification system similar to the one proposed by Lofland and Lofland (1984) for classifying 'social phenomena' as acts, activities, meanings, participation, relationships, and settings. Obtaining different perspectives from observations, field notes, interviews, documents, visual and aural digital recordings, will provide a rich data set that can be cross-referenced to establish validity and deepen insights obtained from different sources.

Strauss and Corbin (1990)

Results: As the exchange took place in March/April of 2011, the results are very preliminary and emerging. I would benefit greatly by the feedback/discussion from AIRS collaborators to my initial analysis. The following observations will form direction for this study: 1. The singing observed in Kenya has deep rooted connection to the singers past tribal traditions. Songs and dances are intertwined with life events which instill an unquestionable pride and value of singing 2. Leadership and relational skills have been a dominant force in the singing process in Kenya.

Discussion: *Relevance to AIRS Milestone Document: 3.1 Intercultural understanding. This study will contribute to the existing qualitative study (2) and (3) in leading to a deeper understanding of the processes involved that lead to the dynamic singing of Kenya and Africa as a whole.

Jim Sparks, a PhD student at Simon Fraser University, is director of vocal music at the Langley Fine Arts School in Fort Langley, BC. With a Bachelor of Music degree from U.B.C. and Masters of Music Degree in Choral Conducting from the University of Arizona, Jim has spent 28 years teaching young singers in BC as a choral director, vocal coach and faculty instructor at the UBC. As a singer, he has studied with David Leighton and Faye Robinson from the Metropolitan Opera in New York and has sung professionally in the southern United States and Western Canada. Jim is on faculty of the BC Choral Federation’s Choral Directorship Program. In 2005, Jim helped establish Project Kenya Sister Schools, a cultural exchange program that puts Kenyan children in schools. Jim is the recipient of the Profession Music Educator Award from the BC Music Educators Association and the 2009 recipient of the Willan Award from the BC Choral Federation. In 2011 he has received a Canada Council Grant for collaborative singing research with Veriovka Choir from Kyiv, Ukraine with the renowned conductor, Anatoli Avdievski. Jim also conducted collaborative cross-cultural singing research on the invitation of the Coralina Choir in Havana, Cuba, with Alina Orraca; the National Boys Choir of Kenya with Joseph Muyale Inzai in Nairobi; the Childrens Community Choirs in Laipikia, Kenya and the Aarhus Conservatory Choir from Aarhus, Denmark.
Sally Busch (Carleton University) Carina Daughtery (Carleton University), Mary Gick (Carleton University)  ssimpso6@connect.carleton.ca

Caregiver Measures for Singing-Related Behaviour Change in a Dementia Population: A Pilot Study

Presentation format: Poster
Sub-themes: 3.3 - Singing and Well-being

Dementia is a progressive disorder that results in memory loss and cognitive decline. Some limited research has suggested that participation in musical activities, in particular singing, may have positive effects on health and well-being among individuals with dementia. The measurement of these effects is problematic, however, as individuals with dementia may not be capable of reliably completing self-report measures. Further, due to the variability of this disease both within and between individuals, it may be difficult for a removed observer to assess change. Thus, this pilot study was designed to assess the viability of using caregiver measures as a means of assessing the impact of singing sessions amongst individuals with dementia. Residents (n = 21, all women) of a long-term care facility for individuals with dementia participated in twice weekly singing sessions for four weeks. During these sessions, caregivers (n = 3) were asked to fill out a measure noting any change in the residents’ behaviour as well as their familiarity with each participant. At the end of the four weeks, as well as at a follow-up session four weeks later, the caregivers were asked if they observed any changes in the behaviour of the residents that persisted outside of the sessions.

Results indicate the usefulness of caregiver measures as a source of both context and content for the effects of singing in this population. They also suggest that singing has a positive impact on individuals with dementia, although these effects may not extend beyond singing sessions. Discussion addresses shortcomings of measures including observer bias to report positive changes and comparability of qualitative vs. quantitative measures. Suggestions for future studies include clarification of what constitutes a significant change, and consideration of whether behavior during singing should be measured against normal daily behavior (e.g., self-care) or other engaging (e.g., exercise) activities.

Sally Busch is a master's student at Carleton University in Ottawa, Canada, under the supervision of Dr. Mary Gick. After completing her first undergraduate degree in the combined honors Arts and Science program at McMaster University (Hamilton, Canada), Sally went on to obtain a Bachelor of Arts in Psychology at Carleton University where she was awarded a Senate medal upon graduation in 2010. Sally’s interest in singing began at age 11 with voice lessons in her hometown of Vankleek Hill (Canada), which culminated in a Grade 8 Level Voice in the Royal Conservatory of Music, and led to the composition and production of a short opera for her undergraduate thesis at McMaster University. In 2010, she was awarded a Canadian Institutes of Health Research Master's Award. Sally is a student member of AIRS and is interested in the relationships between singing, health and well-being (Theme 3.3). Current research projects include associations among singing and different measures of well-being in community choral singers, and caregiver impressions of group-singing related behavior change in a dementia population.
Carina Daugherty is an honour’s student at Carleton University in Ottawa, Canada. She will be graduating this summer (2011) with a Bachelor of Arts in Psychology with a minor in Law and Music. Carina’s interests include singing and health. She has currently completed her thesis, under the supervision of Dr. Mary Gick, on choral singing and senior residents with dementia in a long-term care facility. Carina was enrolled in music lessons at a young age. Although she plays several different instruments, singing, piano, and guitar are her main interests. Currently she enjoys teaching music to a variety of ages, including young children and seniors. She is also actively involved in a variety of bands, performing music in the Ottawa area.

Mary Gick received a B.Sc. in psychology (1975, McGill) and a Ph.D. in experimental psychology (1981, Michigan). She joined Carleton University in Ottawa Ontario in 1985 and conducted cognitive research (publications include articles in Cognitive Psychology, Journal of Experimental Psychology) until her sabbatical in 1992, when she began studying health psychology with the late David McClelland (Boston University), and at the Cambridge Hospital Behavioral Medicine Program (affiliated with Harvard Medical School). She currently teaches health psychology and the community practicum at Carleton. Her long-standing health interests in individual differences (e.g., attachment style) associated with health, coping with medical problems, and seeking treatment for them have led to articles published in such journals as Rehabilitation Psychology and Journal of Psychosomatic Research. Her more recent interests are using a health framework to study environmental behavior; and singing, health and well-being. She has had an active folk music avocation since her teenage years. She taught clawhammer banjo at the Ottawa Folklore Centre from 2003-2007, plays regularly at sessions, and occasionally performs and appears on professional recordings, including the Juno-nominated Michael Jerome Browne and the Twin Rivers String Band. Mary is a Co-Investigator of AIRS and was the Health and Well-being Steering Committee Theme Leader during 2009-10, and will return to that role in 2011.

Merrill Tanner (Glenrose Rehabilitation Hospital/ University of Alberta), Lili Liu (University of Alberta), Leonard Ratzlaff (University of Alberta), Melanie Campbell (University of Alberta), Linda Rammage (University of British Columbia)  merrillt@ualberta.ca

Singing Improves Self Assessed Intelligibility in People with Parkinson’s Disease

Presentation format: Short oral Sub-themes: 3.3

Introduction: The loss of voice quality and loudness as Parkinson’s disease progresses is difficult to manage. Effective voice treatment is available, but is hard to maintain over the long course of the disease. A community based voice improvement program drawing on vocal pedagogy and voice therapy was developed and tested as a PhD project.
Method: Participants attended 90-minute vocal exercise and choral singing sessions twice weekly. In addition to other measures each participant completed a Self Assessment of Intelligibility (Kent, 1994).

Results: A statistically significant change at the .01 level of significance was found on Self Assessment of Intelligibility using a Student’s t test comparing means of the group before and after treatment.

Discussion: Participants perceived a difference in how easily others understood their speech after the voice treatment. They also organized funding for a continuation voice group, which has had good attendance despite -35 degrees Celsius on more than one occasion.

Merrill Tanner is a registered speech language pathologist (SLP) and a singer (Bachelor and Master of Music in Voice Performance). She works part time as an SLP at the Glenrose Hospital with stroke and voice outpatients, teaches singing privately, performs in a duo with classical guitarist Ernst Birss and leads a singing group in the community for people with Parkinson’s disease. Currently, Merrill is also pursuing a PhD to demonstrate the value of “singing voice therapy” for people with Parkinson’s disease.

http://www.uofaweb.ualberta.ca/rehabmed/merrilltanner.cfm

Dr. Lili Liu is the Chair of the Occupational Therapy Department in the Faculty of Rehabilitation Medicine at the University of Alberta. Her research focuses on three themes: technologies and aging, Universal design and aging, and rehabilitation outcome measures and interventions for older adults with cognitive and functional limitations. Currently, she is leading a study with a team to examine how continuing care centers can provide efficient care while maintaining homelike environments for elderly residents. She is also collaborating with the Division of Industrial Design, and the Departments of Computing Science, Pharmacy and Mechanical Engineering to design the “Smart Condo”, a project supported by the Health Sciences Education and Research Common (HSERC) at the University of Alberta. Dr. Liu is the Chair of the Occupational Therapy Department in the Faculty of Rehabilitation Medicine at the University of Alberta. Web page: http://www.uofaweb.ualberta.ca/ot/Lili_Liu.cfm Lili.liu@ualberta.ca

Dr. Leonard Ratzlaff, CM, AOE is the choral conductor for Edmonton’s Richard Eaton Singers. He obtained his graduate degree in choral conducting from the University of Iowa, and his doctoral dissertation on Anton Bruckner’s Te Deum earned him the American Choral Directors Association Julius Herford Dissertation Prize. A professor of Choral Music at the University of Alberta since 1981, he also conducts the University of Alberta Madrigal Singers, and co-supervises the largest graduate program in choral conducting in Canada. His honors include induction into the City of Edmonton Hall of Fame, the Queen Elizabeth II Golden Jubilee Medal for distinguished service to Canadian choral music, induction into the Alberta Order of Excellence, and being named to the Order of Canada. In 2006, he and RES celebrated 25 years of his leadership as conductor. Leonard.ratzlaff@ualberta.ca

Dr. Melanie Campbell is an Associate Professor in the Department of Speech Pathology and Audiology at the University of Alberta, which she joined in July, 2001. She teaches in the areas of voice disorders, voice and speech production, and aural (re)habilitation. Her research interests include a) in general, the role of auditory feedback in speech and voice (including resonance) production, and b) developmental aspects of speech production in hearing, hard-of-hearing and deaf children who use hearing aids/cochlear implants. Melanie completed a B.Sc. in Speech and Hearing Science: Education
Dr. Rammage is Director of the B.C. Provincial Voice Care Resource Program and a faculty member in the Department of Surgery and the School of Audiology and Speech Sciences at the University of British Columbia, Vancouver, Canada. She is a co-founder of the interdisciplinary Pacific Voice Clinic, and has been specializing in Voice Science and Voice Disorders in her research, teaching and clinical activities for over twenty-five years. Dr. Rammage has published and lectured internationally on instrumental assessment of voice disorders, psychopathology of voice disorders, voice care or professional and occupational voice users, muscle misuse voice disorders, and various voice research topics. She is currently engaged in research on the prevalence, nature and risks of occupational voice problems in teachers, and outcomes for occupational voice rehabilitation. She is author of VOCALIZING WITH EASE: A Self-Improvement Guide, and co-author of the texts MANAGEMENT OF THE VOICE AND ITS DISORDERS, 2nd Edition, (A MANAGEMENT GUIDE FOR THE DISORDERED VOICE and VOICE CARE IN THE MEDICAL SETTING. Dr. Rammage is also very involved in professional volunteer work, and has served twice as President of the BC Association of Speech-Language Pathologists and Audiologists, and is currently President of CASLPA. Linda.Rammage@vch.ca

Marya Stonehouse (University of Saskatchewan), Katie McCaw (University of Saskatchewan), Jennifer Nicol (University of Saskatchewan)  mrj.stonehouse@gmail.com

Qualitative Research Interviews about Singing: First Experiences

Presentation Format: Poster Sub-themes: 3.3

Qualitative research interviews are the bedrock of qualitative research. There are different types of qualitative research interviews (Patton, 2002) and different philosophical assumptions informing them (Kvale, 1996). Done well, qualitative research interviews generate rich data that provide specific, focused descriptions about different aspects of the lifeworld, i.e., the everyday lived world of participants (Kvale, 1996). However, despite appearing straightforward to implement, qualitative research interviews are an acquired skill. In this poster presentation, various terms associated with qualitative interviewing will be summarized along with common features of qualitative research interviews, different types of questions, and common characteristics of effective interviewers. Then the grounded theory AIRS project, Singing Your Way to Health, will be described. Grounded theory is an established research method used to generate mid-range explaining a social process, in this case, choir members’ experiences of singing as a health-promoting activity. Interviews are typically used to generate data for grounded theory studies. This project, Singing Your Way to Health, was the setting for two student interviewers’ beginning experiences with qualitative research interviews. Critical incidents, learning, and reflections will be
identified with the intent of providing practical tips for other novice student researchers and for researchers unfamiliar with qualitative research interviews.

Marya Stonehouse (B.A., Honors Psychology) is a first year graduate student in the University of Saskatchewan's Masters of School and Counselling Psychology program. She is enjoying her research assistant experiences with AIRS, likes working with exceptional children and youth, and is a musician.

Katie McCaw (B.A., Honors Psychology) is an incoming graduate student in the University of Saskatchewan's Masters of School and Counselling Psychology program. She is enjoying her research assistant experiences with AIRS, likes working with adults in a student-run community health service, and is a dancer.

Jennifer Nicol (PhD, Counselling Psychology) is an Associate Professor at the University of Saskatchewan. She is also an Accredited Music Therapist and Registered Doctoral Psychologist. She is responsible for the leadership of the AIRS 3.3 theme, enjoys supervising students, likes qualitative research, and is a pianist. For more information, see http://www.usask.ca/education/people/nicolj.htm

Hans Utter (The Ohio State University)  hansutter@hotmail.com

Healing and Mantra: Background and Research
Presentation format: Poster  Sub-themes: intercultural understanding (3.1)

Introduction: The chanting of specific sacred sounds, known as mantras, is central to Hindu and Buddhist spiritual and ritual practices. Mantras are utilized for healing and overall well-being.

Method: I examine the philosophical, psychological, and physiological aspects of mantra within Hinduism. I explore the health benefits associated with mantra chanting through the analysis of sonic and performative dimensions.

Results: I outline potential research directions which can test the claims of the healing powers of mantras through the both empirical and subjective modalities.

Discussion: Sacred sound and chanting are common to many traditional cultures. This study can be utilized in cross-cultural comparisons of chanting, as well as increasing the overall understanding of these practices and potential health benefits.

Hans Utter holds a PhD. in Ethnomusicology from The Ohio State University. His current research focuses on the Imdad Khan Gharana, including a detailed study of Ustad Vilayat Khan’s sitar and vocal techniques. He has conducted research in cognitive Ethnomusicology on entrainment with non-periodic music. Hans is a lecturer in musicology at Ohio State University, and has worked as a course writer, and a visiting consultant at several universities. The AIRS project parallels his recent research into the neurophysiology of music performance He is the author of Trance, Ritual, and Rhythm: The Cult of Mahasu Deota in the Western Himalayas (B.R. Rhythms 2010). A disciple of sitarist Ustad Shujaat Khan, he has performed in America, Canada, Europe, and India.
EVENING CONCERT PROGRAM

Merrill Tanner

- L'Oranger – music by André Popp; lyrics by Eddy Marnay
- A Blackbird Singing – music by Michael Head; lyrics by Francis Ledwidge

EXTRA
(Alex Cameron, baritone/tenor; Carolyn Curry, soprano; David Lane, bass/percussion; Zoe Leger, soprano; Scott Neary, tenor; Maureen Smith, alto)

- I Sing for You – music and lyrics by Nancy King; arranged by Ryan Billington
- Dream Caster – music and lyrics by Carolyn Curry

Utpola Borah & Hans Utter

- Khyal (medium tempo): Raga Madhukosh
  o Sthayi – “Manena manena manena kanha more batiya na"
  o Antara – “Sher karata more baiyan pakadli lajna awe more chunari bhigodi na”
- Goalporiya lokogeet: folk song from Southern part of Assam

Sally Busch

- Vergebliches Standchen – Johannes Brahms (1833-1897)
- Someone to Watch Over Me – music by George Gershwin; lyrics by Ira Gershwin

Jenny Sullivan

- The Mistletoe Bough – music by Kitty Donohoe; lyrics by Thomas Hayne Bayley

Bing-Yi Pan

- Jasmine Flower

Kedmon Mapana

- Music from Wagogo village in central Tanzania

Jim Sparks

- Maasai songs (Circle songs) with audience participation
  o Omabani
  o Lalele Osa
ARTIST BIOS

Merrill Tanner is a lyric soprano, voice teacher, speech-language pathologist and PhD student in Rehabilitation Medicine. She has a Masters of Music degree in voice performance from the University of Alberta and has studied with Selena James, Harold Wiens, Heather Myers and Cory Miller. In addition, she has received coaching from Vera Rozsa, Dalton Baldwin, Beatrice Gauchet, John Wustman and Richard Miller. Her dramatic roles have included Monica in Menotti's The Medium (Saskatoon Opera Society), Sylphinia in Only a Miracle (Prairie Opera), the Mother in The Little Match Girl (Prairie Opera), and the Countess in Strauss’ Die Fledermaus (Saskatoon Shakespeare on the Saskatchewan Festival).

Merrill carries her love of singing over into her work in geriatrics, where she has conducted a study on the "The Effect of Singing Lessons on Voices of Persons with Parkinson's Disease", and is currently doing research on singing-based voice therapy and aging as part of her PhD program.

Merrill has chosen "A Blackbird Singing" by Michael Head because the words seemed to suit Newfoundland. It is about ships, singing and longing. "L'oranger" by André Popp is a beautiful French folksong about a young girl thinking about love. It has an easy to learn harmony in the refrain that the audience could learn.

EXTRA is the flagship vocal ensemble of the St. Francis Xavier University music department.

One of three vocal ensembles at StFX, EXTRA performs Jazz, Pop and R&B standards and original music, all written for 4-6 voices in extended harmony. The group performs for campus events, variety shows, and presents a concert series in Antigonish, Nova Scotia. They also sing for regional high schools, festivals and special events. EXTRA membership currently includes mostly voice majors, but is open to the music department and wider university student community by audition. The vocal jazz curriculum at StFX includes master classes in solo performance, improvisation, a broad guest artist series, and courses in Diction for Jazz/Pop Singers, Voice Pedagogy, Vocal Arranging, and Vocal Jazz Styles and Literature. Twice a year, the ensemble shares the stage with the StFX University Choir and SASS, a contemporary vocal ensemble for young women.

Members of EXTRA are composers, arrangers, soloists, pianists, guitarists and improvisers.

“I Sing for You” is about interplay/communication between two people, and describes the spirit of creative interaction. “Dream Caster” is about the connection between music, dreams and spiritual health... its mood is exploratory and reassuring. Its rhythm is like a gentle procession into sweet and comforting sleep.
Utpola Borah is an ethnomusicologist, educator, cultural archivist and performer of Hindustani (North Indian) Classical music. She completed her Ph.D. at the time University of Delhi, India. Utpola’s extensive research on the Bihu songs of Assam formed the basis of her book Bihu Festival of AssamMusic Dance & Performance (2005). Her varied experience at the Archive and Research Centre for Ethnomusicology (AIIS), the Indira Gandhi National Open University, and many other institutions has earned recognition as a scholar, educator and archivist in ethnomusicology, folklore, anthropology and Performing arts of India. Utpola is an accomplished Hindustani classical vocalist. She has been trained extensively in the traditional “ Gurukul” system under Dr. Prabha Atre. Utpola is an All India Radio and Doordarshan (National Television) artiste and has widely performed the Khyal, Thumri, Dadra, Kajri, Holi, Chaiti, Barahmasa and Folk songs in India, Europe, and the United States.

Hans Utter is currently a PhD. candidate in ethnomusicology at The Ohio State University. His current research focuses on the Imdad Khan Gharana, including a detailed study of Ustad Vilayat Khan’s sitar and vocal techniques. He has conducted research in cognitive ethnomusicology on entrainment with nonperiodic music. Hans has worked as a lecturer in musicology at Ohio State University, as a course writer, and as a visiting consultant at several universities. The AIRS project parallels his recent research into the neurophysiology of music performance. He is the author of Trance, Ritual, and Rhythm: The Cult of Mahasu Deota in the Western Himalayas (B.R. Rhythms 2010). A disciple of sitarist Ustad Shujaat Khan, he has performed in America, Canada, Europe, and India.

The song texts of “Sthayi” and “Antara” are a metaphorical exploration of the intersection of spiritual and physical love.

Sally Busch is a Master's student in Psychology at Carleton University under the supervision of Dr. Mary Gick. Sally's research falls into Theme 3.3 of AIRS - Singing and Well-being. She took classical voice lessons for over ten years and completed the Grade 8 Level Royal Conservatory Voice Exam. Sally has also performed musical theater and sung with several choirs, including the Amaryllis Women's Choir, McMaster University Choir, and the Canadian Centennial Choir.

“Vergebliches Standchen” is an example of German lieder (art songs) which tells the tale of an evening’s interaction between a young lady and her suitor. The suitor implores the young lady to unlock the gate so that he may enter and profess his love. She replies that her Mother has forbidden her from opening the gate. He insists that the evening's chill will freeze his heart and implores her again to open the gate. The young lady, perhaps suspecting his intentions are not pure, replies that he is a knave and can make his bed in the street.

“Soemone to Watch Over Me” is considered an American jazz standard; it is also a personal favorite.

Jenny Sullivan – I am a developmental psychologist studying singing and language development on the weekdays, and a choir singer on Sundays. I was brought up surrounded by music. My mother had been an aspiring Opera singer when she met and married my father, and gave up thoughts of a career to have 6 children. My father was an avid music appreciator. He also taught a course on ballads as part of his English department curriculum. My mother didn't give up music completely to raise the children, as she spent her whole life singing in various choirs and choral societies. So, from the time I could read lyrics at the age of 4, I began singing with my mother in our local church choir. I have continued singing in choirs my whole life. Currently, I sing in the "Sunday Evening Choir" at St. Ninian's
cathedral in Antigonish, NS. Our choir is quite unique in that it consists of two singers, myself and Janet Becigneul, who is our director and our alto harmony vocalist; Marilyn, our pianist playing accompaniment; Michelle, our flutist usually playing tenor; and my husband Joe on saxophone, playing the bass part.

The story on which “The Mistletoe Bough” is based is said to have possibly taken place sometime in the 15th century. The story first appeared as part of a long poem by Samuel Rogers in 1823. It then appeared as a song in 1834 with words written by Thomas Hayne Bayley and music by Sir Henry Bishop. I first heard the song performed by Kitty Donohoe from Ann Arbor Michigan on her 1986 album "Farmer in Florida". She had come across the poem by T. H. Bayley, had not known it had been previously set to music, and wrote her own tune. Her accompaniment is far superior to the original. It is a hauntingly beautiful song.

Kedmon Mapana is an Assistant Lecturer at the University of Dar es Salaam, Tanzania, Department of Fine and Performing Arts. He earned a Music Education Certificate from Butimba Teachers College, a BA in Music and a Master of Arts in Music from the University of Dar es Salaam. Currently, he is a doctoral student at Seattle Pacific University in curriculum and instruction with emphasis on music education and ethnomusicology. He is a dancer, singer, drummer, Gogo flute, kayamba and ilimba player, music performance organizer, choir director, scholar and community music teacher. From May to July 2006 and April to June 2007, Kedmon taught choral and dance workshops in schools and Lutheran churches in Sweden and Denmark. He is featured in a 15-minute documentary filmed in Denmark in 2008, “Kedmon Mapana in Denmark” (Milbo Media: MM-DOK 44005008). In July 2008, he led a group to Poland to perform and give workshops at a cultural festival in Wroclaw. He has presented invited academic papers at Africa University in Zimbabwe, University of Washington School of Music, and University of Dar es Salaam’s Ethnomusicology Symposium. He has published an article on his thesis research in the African Cultural Studies Journal (19(1) June, 2007:81-93). He was one of the Panelists for Teleconference for the Society of Ethnomusicology Annual Meeting 2008 at Wesleyan University-Africa. He has organized three large Wagogo cultural festivals between 2005 and 2010 featuring Gogo music and musicians from a number of villages in his home area: Chamwino Village in the Dodoma Region of Central Tanzania. Recipient of a 2009 fellowship award from Jubilation Foundation, and recipient of a 2010-2011 award from AIRS (Advancing Interdisciplinary Research in Singing, Canada) for research on Wagogo children's music, Kedmon is a teaching artist for Smithsonian Folkways certification workshops.

Jim Sparks is director of vocal music at the Langley Fine Arts School in Fort Langley, British Columbia where he directs choirs, vocal ensembles, and co-teaches the music major program. With a Bachelor of Music degree from U.B.C. and Masters of Music Degree in Choral Conducting from the University of Arizona, Jim has taught all levels of choirs in BC as choral director, vocal coach and has been a sessional faculty instructor at the University of British Columbia as well as current faculty instructor of the British Columbia Choral Federation’s Choral Directorship Course. Choirs at LFAS have presented demonstration programs in major festivals in Canada including Podium 2006, Musicfest Canada and the Rocky Mountain Festival, Banff. LFAS Choirs and Orchestra have staged major works such as the Mozart Requiem (2002), Carmina Burana, (2000) and the Samuel Barber choral and orchestra collaborations. The choirs can be heard on New York Reflections (2000) – recorded in the Cathedral of St. John the Divine in New York City, The Mozart Requiem (2002), and Collage (1996)
recordings. In the past two years, Jim has collaborated with Dr. Wes Janzen in preparing the LFAS choirs as well as Trinity Western University Choirs for Christmas at the Chan Centre and most recently, the Bach B minor Mass with the Vancouver Symphony in Feb 2011. In demand as an adjudicator and guest conductor, Jim has worked with choirs across Canada, the United States, Kenya and Cuba.

In 2005, Jim helped establish Project Kenya Sister Schools, a cultural exchange program that assists Kenyan children in attending schools. In January 2008, Jim traveled to the PKSS project in Nanyuki, Kenya as well as Nairobi, where he had sessions with the Kenyan National Boys Choir and the Mungano National Choir. Jim is the recipient of the Professional Music Educator Award from the BC Music Educators Association and the 2009 recipient of the Willan Award from the BC Choral Federation. In 2011, he has been invited and will travel to conduct collaborative research with the Schola Cantorum Coralina Choir in Havana, Cuba, with Alina Orraca; the Veriovka Choir and the National DUMKA Choir from Kyiv, Ukraine with Anatoli Avdievski; the National Boys Choir of Kenya with Joseph Muyale Inzai; the Childrens Community Choirs in Laipikia, Kenya and the Aarhus Conservatory Choir from Aarhus, Denmark as well as several choirs across Canada. While on sabbatical in 2011 Jim is pursuing his PhD studies in Arts Education at Simon Fraser University.

The two Maasai songs are Samburu chants. Both pieces ("Omabani" and "Lalele Osa") are "gathering songs" inviting the nomadic people together for celebration. Both pieces feature the main melody layered melodic fragments added then subsequently taken away. I learned these chants while working with the National Choir of Kenya in April, 2011. My presentation at the AIRS meeting will feature the Boys Choir of Kenya, an organization dedicated to sharing tribal and pan-african singing.

**AIRS 3rd Annual Meeting - July 2011**

**SONGBOOK**
Viva la musica
This is a traditional composition from Bhatkhande Kramik Pustak Malika-2Set in Raga Khamaj and 16 beat Rhythms cycle known as Tintala. There are a number of complex embellishments which are not included in the interest of simplicity. Here is a description of the raga: (note - Sa Re Ga Ma Pa Dha Ne Sa corresponds to Do Ri Mi Fa Sol La Ti Do, lower case indicates a flat, Aaroh/Avroh = ascending and descending). The alap is a basic outline of the melody (written w/out glissandos or microtonal inflections).

**Sthayee (first part of the composition)**

Namana karu main sadguru charana
Saba dhukha harana bandita charana

**Antara (2nd or end of the composition)**

Sudha bhav dhara anta karana
Suranara kinara bandita charana

**Meaning**

I bow down to my Guru (mentor)/who takes away all my sorrow

Praying with emotional purity/brings all divine being together
RAGA KHAMAJ

AAROH / AVROH:  S G M P D N S, n D P M G R S
PAKAD (MUKHYANG - MAIN NOTES):  G M P D n D, M P D, M G
VADI (MAIN NOTE) – G  SAMVADI (NEXT MAIN NOTE) - N
TIME OF SINGING – SECOND PERIOD OF NIGHT

RAGA KHAMAJ

AALAP:

4. G M P D N S, (S) - n D P, P D N S, -
5. n D P D N - S, S, R, S, S, n D P - S, G M P D N S, -
Music from the Wagogo people of the Dodoma region of Tanzania.

**Cibula Iye, Cibula**

- **Call:** Cibula iye cibula Ma-tu, Cibula iye cibula, Ma-tu,
- **Resp:**

**Game:** Standing circle, with one leader. While the leader sings the call, all participants bounce the beat with both feet. All sing the response, while jumping towards the center of the circle, then back out again once the call is sung. The leader moves back and forth between the A section (line 1) and the B section (line 2), with as many renditions of each section as desired. The challenge comes for the responders, trying to figure out when to jump forward and chant “Matu,” because the caller can change whenever he or she wants.

**Simama Kaa, Ruka**

- **Call:** Simama kaa Simama kaa, Ru-ka, ru-ka, ru-ka, Simama kaa,
- **Resp:**

**Translation:**
Simama: Stand up
Kaa: Sit down
Ruka: Jump

**Game:** Start the song seated in a chair. Act out the movements as you sing them, jumping on the beat for all of measure three (i.e. four times).

**Noponkhola**

- **Call:** Noponkhola, m-langom di ndwe-di nko-le ha-i, m-langom
- **Resp:**

**Translation:**
Noponkhola: Where can I pass?
Mlango mdinde di: The door is closed.

**Game:** Children hold hands with one child located at the circle’s center to lead the game. The leader sings, while moving in and out of the circle, seeking a way to pass under the arms of the children. The object of the game is for the students in the circle to prevent the one in the middle from passing through, so it can take a while for one pair of children finally create enough space for the leader to move through. Then, one of the pair jumps in the middle as the new leader.
One Voice (Ruth Moody, The Wailin’ Jennys)

This is the sound of one voice
One spirit, one voice
The sound of one who makes a choice
This is the sound of one voice

This is the sound of voices two
The sound of me singing with you
Helping each other to make it through
This is the sound of voices two

This is the sound of voices three
Singing together in harmony
Surrendering to the mystery
This is the sound of voices three

This is the sound of all of us
Singing with love and the will to trust
Leave the rest behind it will turn to dust
This is the sound of all of us

This is the sound of one voice
One people, one voice
A song for every one of us
This is the sound of one voice
This is the sound of one voice

Contributed by Lisa McLellan, 2009
VINDUM, VINDUM, VEFJUM BAND

ICELANDIC ROUND

TRANSL: HELGA GUOMUNDSDOTTUR

WINDING, WINDING, WEAVING YARN
LET'S MAKE CLOTHING IN THE BARN.
MAKE A BOW FOR MY FRIEND

(HENYGTA Fyrir (-) HEN SIN SEYGTA
SVO SKAL (-) SNU-A SEG.

BEND YOUR KNEES FOR MY FRIEND
THEN SHALL TURN AROUND.
Land of the Silver Birch

This Canadian folk song is often sung to help keep a rhythm while canoeing through lakes surrounded by the abundant birch trees. The song brings to mind many images of Canadian nature and wildlife. For example, animals such as the beaver, the moose and the goose are mentioned. Aboriginal culture is also represented by the phrase “High on a rocky ledge I shall build a wigwam”; a wigwam is a domed, round shelter built of grass, brush, bark, rushes, mats, reeds, hides or cloth. These shelters were common among numerous First Nations tribes. The song is also sung around a campfire and often in a round. Though the origin of this song is unknown, it has been a popular tune to sing at boy scouts and Girl Guide camps since the 1930s.

http://www.youtube.com/watch?v=OUgHzMPflek (demonstrates the round)
http://www.hickerphoto.com/data/media/24/canoeing_vacations_sc172.jpg

submitted by Arla Good
I’s the B’y that Builds the Boat

This traditional Newfoundland folk song is written in a dialect unique to the East Coast of Canada. Newfoundlanders have a distinct way of speaking with words and phrases exclusive to their region. The title translates to “I’m the buddy.” It is believed that the song originated in the 1870s in a Newfoundland fishing village. This song tells the story of a fisherman who catches some fish to take home to his wife, Liza. It is a lively dance song and the lyrics reflect the East Coast dependence on the sea. This song is a popular tune in dance halls and at kitchen parties; these are parties with Celtic-based music in intimate settings such as a friend’s home. These traditional gatherings are still common among people of the East Coast.

The song was covered by the popular Canadian group - Great Big Sea.

http://www.youtube.com/watch?v=S-bQn9DtgUA

http://www.tourismlowernorthshore.com/harrington.asp

submitted by Kelly Gillis
Mo Li Hua (Jasmine Flowers)

This song is about Jasmine Flowers which are beautiful and have good smell. Yet they are very strong and can stand against the wind and rain. The underlying message is to encourage people to face their difficulties and be strong like Jasmine Flowers.

The origin of the song “Jasmine flower” is the xiao diao (a style of Chinese lyric folk song) ‘flower song’ which has been spreading for hundreds of years. There are many different versions of “jasmine flower” in different location, like Hebei, Zhejiang, Jiangsu, etc. These versions of “Jasmine flower” often share more similar lyrics and less similar melodies.

The Jiangsu version “Jasmine flower” is the most well-known one for western people, which was firstly introduced in 1804 by an English scholar John Barrow in his book Travel in China. He names this song “Moo-Lee-Wha”, which is the “Mo-Li-Hua” in Jiangsu dialect. The melody has become well known among Western listeners as it was included by Giacomo Puccini in his opera Turandot, where it is associated with ‘Turandot’s splendor’. In 2008, Mo Li Hua was chosen to be one of the music themes for the Olympics in Beijing.

submitted by Bing-Yi Pan
AIRS Round

*In this round, each new voice enters when the previous voice reaches the $\|$ (bar 4, beat 4).

Annabel Cohen

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**Ad-**

**vancing In-ter-dis-ci-plin-a-ry Re-search on Sing-ing The**

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**So-cial Sci-en-ces and Hu-man-i-ties Re-search Coun-cil Is**

**Br-i-**

**n-ing Re-search on De-

vel - op - ment, Ed - u-cation,**

**and Well Be - ing.**

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Se-ven-ty five Re-search-ers in Six-teen Coun-tries are O-ver - see - ing.

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Ostinato

Airs Re-search on Si-ling

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2010 A. Cohen

(work in progress collaborators welcome)
AIRS Annual Report Year 1 Sub-Theme 1.1
“Production and Perception”
Prepared by C.D. Tsang
(April 1, 2009 – March 31, 2010)

Sub-Theme 1.1 Members:
S. Dalla Bella
S. Falk
R. Friendly (PhD student)
C. Palmer
I. Peretz
L. Phillmore
C. Palmer
G. Schlaug
L. Stewart
L. Trainor (co-Team Leader)
C. Tsang (co-Team Leader)

Year 1 Milestones and Deliverables

A review of the singing development literature was conducted by R. Friendly (PhD student) and L. Trainor. This review was the basis for a conference presentation at the 1st Annual AIRS General Meeting in June 2009. A review paper is in preparation and we anticipate manuscript submission in late summer 2010.

1.1. Research by Members

L. Stewart Student project: ‘A rehabilitation study of congenital amusia’ carried out by Susan Anderson, an MSc student on the Goldsmiths MSc in Music, Mind and Brain. This project will be written up and presented at a future AIRS meetings.

L. Stewart Student project: ‘A study of pitch direction processing in children’ carried out by Amy Fancourt, an MSc student on the Birkbeck MSc in Neuroscience. A poster will be presented at the AIRS meeting in Seattle, as well as at ICMPC.

Susan Anderson’s rehabilitation project may be extended but this will depend on obtaining funding.

Sub-Theme 1.1. Year 1 Research Summary

This first year has been a transition year in many ways for subtheme 1.1. A change in the leadership of the theme occurred in December 2009, with S. Brown leaving the project and C. Tsang joining L. Trainor as Theme Leader. This necessitated some change in the research direction of 1.1, and the newly developed research project focuses on the link between the development of the perception of singing and the production of singing. Much of the work from January to March 2010 was devoted to developing a coherent and viable research project that will yield significant and publishable data.
Pilot stimuli for our study examining the perception and production of singing in young children have been created. We are currently in the process of finalizing the testing protocols and preparing to begin pilot testing in a small population of 6-year-old children. L. Trainor has met with a local music education group working in a Hamilton area grade school and the principal of the school to arrange for testing of Grade 1 students in a singing perception and production test battery. A further meeting with the teachers of the students will be held in September 2010.

We anticipate the start of pilot testing to begin in August through September, 2010, with the beginning of actual data collection to begin in October, 2010 in a group of Grade 1 children in a Hamilton area grade school. Another parallel study with JK/SK children in a local London area pre-school may also begin in the fall subject to institutional approvals.

This research project has the possibility of becoming a longitudinal study (pending renewal by the school and teachers involved). Thus, the creation of a viable set of testing materials in Year 1 was a vitally important first step. If the study proceeds as planned, we should be able to have data ready for dissemination by summer 2011 (Year 3), most likely in the form of conference presentations initially, eventually leading to published manuscripts in future years.

We acknowledge that we have not been overly successful in involving many members of the research sub-theme in our research discussions. However, we hope that with the establishment of a viable set of stimuli and testing protocols in this first year, this will make it easier for other theme members (and other AIRS themes) to participate and/or contribute to the research in future years.
Projects based in Nova Scotia, Canada
(St. Francis Xavier University)
1. Infant response to infant-directed (ID) singing and speaking.
   - Students: Tricia Brosha (B.A. Student)
   - Advisors: Hauf
   - Notes: Stimuli are presented on an eyetracking screen. In addition to eye tracking, measures include body movements, vocalization, and heart rate. In both cases, infants spend more time looking at mouth than eyes when stranger is singing and text is familiar. However, looking time is more balanced when the song is novel, suggesting that infants were looking for emotional cues. Data were presented at Nova Scotia Developmental Psychology Conference and CPA and are nearly ready for publication.

Projects based in Fredericton, Canada
(UNB)
Nothing to report at this time
   - Advisor: W. Cichocki

Projects based in Toronto, Canada
(University of Toronto and Ryerson University)
1. Multimodal aspects of maternal speech and singing in different contexts (infant in view, out of view, or presented on video).
   - Students on this project: Judy Plantinga (PDF, UT Mississauga), Lisa Liskovoi (M.A. Student, Ryerson)
   - Advisors: Trehub/Russo
   - Notes: Poster presented at Neurosciences & Music IV (Edinburgh)

2. Age-related changes in vocal reproduction of intervals (ascending and descending perfect fifth) with different auditory models (voice, piano, flute) and auditory (vocal) vs. auditory-visual models.
   - Students: Judy Plantinga (PDF, UT Mississauga), Lily Zhou (B.Sc. student, McMaster)
   - Advisors: Trehub/Russo
   - Notes: Data collection should be complete this summer

3. Infants’ differential responsiveness to speech and singing
   - Students: Marieve Corbeil (PhD student, UM) and Audrey Morin (undergrad assistant).
   - Advisor: Trehub
   - Notes: There were long delays due to complicated funds transfer from UPEI to UM. Marieve gave a talk on this work at ICMPC in Seattle.

4. Pitch and interval reproduction as a function of age, choral experience, and interval conventionality
   - Students: Beste Kalender (Ph.D., U of T)
   - Advisors: Trehub & Russo
   - Notes: data collection is complete on the choristers and will commence on the untrained children. Project will be basis of doctoral dissertation. A subset of the children will be recorded again at Ryerson using face-tracking equipment.
5. Effectiveness of song vs. speech to regulate emotion in infants: Niusha Ghażban (Ph.D., Ryerson)
   - Students: Niusha Ghażban (Ph.D., Ryerson) and Lisa Chan (Ph.D., Ryerson).
   - Advisors: Russo & Trehub
   - Notes: Majority of data collection is complete. Data have been analyzed and it seems that there are behavioral and physiological benefits to regulating infant stress via signing. Work to be presented at AIRS.

6. Mimicry in song perception:
   - Students: Lisa Chan (Ph.D., Ryerson), Lucy McGarry (Ph.D., Ryerson)
   - Advisor: Russo
   - Notes: Lisa is continuing with this work for her dissertation. She is extending her scope to consider unique contributions of audio and visual channels and to look at mimicry of facial movement as well as emotion (e.g., sympathetic masseter activity in response to viewing jaw opening). Together with Lucy McGarry we are also looking at involvement of the mirror neuron system in vocal mimicry.

7. Music processing in deaf adults with cochlear implants (including vocal pitch and interval imitation).
   - Student: Mathieu Saindon (Ph.D. student, UTM)
   - Advisor: Trehub
   - Notes: Poster presentation at CPA and spoken presentation at SMPC’11.

8. Facial animation and eye tracking in trained vs untrained singers
   - Student: Lisa Chan (Ph.D. Student, Ryerson)
   - Advisors: Russo/Edwards
   - Notes: Data collection is ongoing. Facelab system is now working properly and we are able to mine the data. Work will be presented as part of a symposium at ISPS in August. Inclusion of eye tracking component builds on work recently published by Russo, Sandstrom and Maksimowski in Psychomusicology: Music, Mind & Brain. We aim to determine whether singers look more directly at camera for consonant intervals.

Projects based in Hokkaido, Japan
(Hokkaido University)

1. Adult interpretation of infant babbling as speech or singing.
   - Advisor: Adachi
   - Notes: Data was collected from 86 college students (both men and women) about their interpretation of baby babble (presented at ICMPC11). Data analysis is ongoing. However, for mothers who are actively interacting with their own children by talking/singing use auditory cues more reliably than those who are less active.

2. Exploratory study of infants’ repetitive movements while babbling
   - Student: Xing Xing Ding and two undergraduate students.
   - Advisor: Adachi
   - Notes: To visit 10 Japanese families with 9 to 10-month old children and to take audio-visual recordings during mother-infant exchange.

3. Cross-cultural comparisons of acoustical features of a toddler’s babblings generated in infant-directed speech and song.
- Student: Xing Xing Ding (China) and two undergraduate students
- Advisor: Adachi, Illari (Brazil), Guomundsdottir (Iceland)
- Notes: Cross-cultural comparison may involve all 4 cultures and will focus on toddlers’ vocalizations during infant-directed speech and song (qualitative and quantitative analyses)
**AIRS Annual Report Year 2  Sub-theme 1.3  Date: June 2011**

**For the time period April 1, 2010 to March 31, 2011**

<table>
<thead>
<tr>
<th>1. Theme Number: Theme 1</th>
<th>Sub-theme Number: Sub-theme 1.3</th>
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<tbody>
<tr>
<td>Theme Name: Development</td>
<td>Sub-theme Name: AIRS Test Battery</td>
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<table>
<thead>
<tr>
<th>2. Leader or Co-leaders name</th>
<th>Leader or Co-leaders institution</th>
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</thead>
<tbody>
<tr>
<td>Ananbel J. Cohen</td>
<td>University of Prince Edward Island</td>
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<tr>
<th>3. Subtheme Collaborators:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investigator Name and Institution</td>
</tr>
<tr>
<td>Mayumi Adachi - Psychology, Hokkaido, Japan (also 1.2)</td>
</tr>
<tr>
<td>Annabel Cohen – UPEI, Charlottetown and Team Leader 1.3</td>
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<tr>
<td>Simone Dalla Bella – Psychology, Poland (also 1.1)</td>
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<td>Simone Falk – Germany</td>
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<td>Mike Forrester – University of Kent, UK</td>
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<tr>
<td>Helga Gudmundsdottir - Music Education, Iceland (also 2.1)</td>
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<tr>
<td>Nathalie Henrich – France (also 1.1, 1.2 and 2.3)</td>
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<tr>
<td>Beatriz Ilari - Brazil/USA (also 2.1 and 3.1)</td>
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<tr>
<td>Esther Mang – Hong Kong Baptist University (also 2.1)</td>
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<tr>
<td>Anick LeMarche – AIRS Post-doc until end of August</td>
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<tr>
<td>Psyche Loui- Harvard Medical School &amp; BIDMC (also 3.3)</td>
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<tr>
<td>Jaan Ross – Music, Estonia</td>
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<tr>
<td>Gottfried Schlaug – Harvard Medical School and BIDMC (mainly 3.3 – health)</td>
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<tr>
<td>Rena Sharon – Music, UBC, Vancouver (also 3.3, and 1.2)</td>
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<tr>
<td>Stefanie Stadler Elmer –Psychology, Zurich, Switzerland</td>
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<tr>
<td>Christine Tsang – Psychology, London Ontario (also 1.1 – Team Leader)</td>
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<tr>
<td>Jennifer Sullivan – Psychology, St. FX Antigonish, NS (also 2.3)</td>
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<tr>
<td>Coralie Vincent – Laboratory of Phonology and Phonetics, CNRS, Paris (also Digital Library)</td>
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<tr>
<th>4. Project description - based on the Milestone document</th>
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<tr>
<td>This sub-theme focuses on the gross assessment of singing skills across the lifespan, cultures, gender, music training as a foundation for a comprehensive model of singing acquisition taking individual characteristics, culture, and universals into account. An 11-element test battery was developed at UPEI by Annabel Cohen in conjunction with 2 honours students (Marsha Lannan, Jenna Coady), and with a third (Emily Gallant) the battery was piloted in longitudinal and age cross-sectional designs in 2008. In 2009 two further honours theses at 2 universities (UPEI and St. Francis Xavier) commenced, and a graduate student in Estonia began work with Jaan Ross and Stefanie Stadler Elmer (Zurich) in 2010. In 2010-2011, an additional honours thesis was conducted at UPEI, St. Francis Xavier, and University of Kent (2 theses) and work was begun in Iceland. Dr. Bing-Yi Pan arrived at UPEI in Feb. 2011 to accelerate efforts. Plans are underway to test in the four countries involved in the study of sub-theme 3.1 on Singing and Cross-cultural understanding (comparing Grade V children in Canada, Brazil, Kenya, China) in which the role of singing on attitudes to non-native persons is being investigated. We expect to use a new algorithmic analysis of recent doctoral recipient, Johanna Devaney (McGill), to increase the efficiency of pitch analysis. Information will be shared virtually (via a digital library, and web-site) such that researchers in the theme 1.3 can compare singing ability on the various test components as a function of culture, gender, age etc. Students working on the project have been and will be provided enormous opportunities to be in contact with peers, experts, and cultural contexts, and to learn about analysis of singing, and the workings of a digital repository.</td>
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</table>
One challenge is the overwhelming richness of the data. Another is to finalize the protocol and to develop specific training protocol so as to "really" start collecting data.

The constituency aims to collect the data across ages, cultures, and time, and to take advantage of the temporal and global scope of the grant. Theme 1.3 will populate the digital library with examples of the components of the test battery from longitudinal and cross-sectional studies. Within Theme 1, there should be discussion with 1.1 which will be conducting more refined tests than 1.3; there should be discussion with 1.2 which will be conducting focused research on the audiovisual relations in singing. The data from 1.3 should reveal constraints on natural song acquisition as discovered by 2.1, should show effects of training (2.2), and provide a foundation for what can be learned through singing (2.3). 1.3 will inform 3.1 in regard to what aspects of singing style may be resilient and what level of song complexity is appropriate for teaching songs of non-native cultures.

The opportunity of a 7 year grant (including 1st and 2nd year pilots) enables collection of longitudinal, cross-cultural data and exploring mental health status, (e.g., presence of dementia or brain damage through stroke) and role of musical training. Collaborators from researchers and others from many cultures and continents, with access to teleconferencing and an interactive web-site, digital repository and associated staff supporting it at UPEI and McGill maximizes progress.

<table>
<thead>
<tr>
<th>Milestone activities and deliverables and what was delivered in Year 2.</th>
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<tbody>
<tr>
<td>1. Review of longitudinal singing tests: Deliver presentations and publications</td>
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<tr>
<td>This milestone has not seriously begun, on the pretext that there is actually very little in the way of longitudinal data on singing, however, there is some (e.g., Kreutzer, Welch) and this must be reviewed in Year 3</td>
</tr>
<tr>
<td>2. Develop model of how singing is acquired; Pilot tests across the lifespan: Proposed Deliverable - initial longitudinal data lifespan start points</td>
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<tr>
<td>Some cross-sectional data has been collected, and in two cases, this is being regarded as initial longitudinal starting points (Nova Scotia, and UK); more on the way</td>
</tr>
<tr>
<td>3. Revise tests for cultural contexts: China, South Africa, Canada. Deliverables: Extend to different Canadian contexts and test 3x per year:</td>
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<tr>
<td>There has been a partial revision for China and South Africa; Extension to St. FX (Nova Scotia) and to Chinese immigrants in Canada</td>
</tr>
<tr>
<td>4. Pilot tests across 3 countries and lifespan ages; Deliverables: Extend data collection to 3 countries and extend to other countries</td>
</tr>
<tr>
<td>Testing in Estonia, UK, and Iceland and soon Brazil &amp; Poland?; and Kenya, and China</td>
</tr>
<tr>
<td>5. Develop comprehensive battery for singing ability across cultures and age; Deliverables: Analyse, notate, transcribe results obtained and move to DL, and create comprehensive screening test</td>
</tr>
<tr>
<td>Analysis, notation, transcription has been carried out of some materials, with preparation for ingestion in the DL by creation of segments of 11 components of the test battery; AIRS test battery has undergone revisions, and materials for testing have been recorded, improved, and distributed (CD); yest additional improvements have been made in early year 3 by Bing-Yi Pan.</td>
</tr>
<tr>
<td>6. Preliminary model of cultural influence on singing ability; Deliverables: Development of preliminary model of cultural and individual influences on singing</td>
</tr>
<tr>
<td>Preliminary discussion with Steering Committee, and item on 3rd Annual meeting schedule for development of theory in the context of individual, innate, and cultural influences on the acquisition of singing skill</td>
</tr>
</tbody>
</table>
6. How many of the members of your sub-theme attended the 2nd Annual Meeting of AIRS in Seattle? _11_
How many of your sub-theme members (only Canadian) received a Research Time Stipend in Year 2? _2_
How much funding, in Year 2, was awarded to your sub-theme to support student research? $___$16000

7. Item 4 above provides a brief description of the accomplishments of the sub-theme with respect to the milestones. Please describe any additional particular responsibilities, if any, that you would like to comment on high-lighting activities of your sub-theme or its members in Year 2 (e.g., supervision of student work; writing ethics review, liaising between AIRS and students) to assist reaching the Goals of AIRS and/or the goals of the sub-theme. If you feel this information is suitably provided in other sections of this report, please feel free to move on.

From J. Ross AIRS gives an excellent opportunity for participate in international research team and develop new methods and theories. Generous funding by AIRS is given one of Estonian doctoral student an opportunity to research and develop her academic career. Estonian “AIRS team” consists mainly only of two persons who interact in weekly basis (discussions about adapting test battery, testing process, article manuscript and presentations). We also try to recruit undergrad students of musicology to be more interested in music psychology and do their course works about themes related to AIRS. We have introduced AIRS to our Estonian colleagues as much as possible and met wide and sincere interest of AIRS goals and work. We try to collaborate as much as possible with the international AIRS research team (participating Annual Meetings, teleconferences, intense e-mail correspondence) to contribute toward AIRS goals.

8. Please describe the results your sub-theme has obtained or the nature of the information you sub-theme members were working toward obtaining in Year 2. Please be careful to distinguish between actual and hypothesized results. If the information is provided elsewhere in this document, please refer simply to that section or sections.

From Mike Forrester: Preliminary observations indicate: it would seem (a) that there is a clear developmental trend in children’s abilities when producing the full vocal range - older children exhibiting a great range; (b) older children also produce more imaginative spontaneous singing when asked; (c) there are indications of gender differences with older age groups - with girls exhibiting more creativity than boys, and (d) there are indications of considerable variability in the singing of the youngest children.

9. Please describe scholarly outcomes of this work expected by next year or later

**Outcomes:**
The test battery will provide a wealth of data as the foundation for (a) a model or models of singing acquisition, and b) scholarly articles and work in singing. It will help to explain singing behaviors and effects of singing observed and studied in Themes 2 and 3 such as why certain songs appear in children's repertoires of songs acquired naturally (subtheme 2.1), that is, identifying what aspects of song can be easily mastered in early childhood and at later ages; and whether children in different cultures are nevertheless able to sing the music of any culture up to a certain age, after which they become locked into the singing style(s) of their own culture (of interest to subtheme 3.1 examination of the role of learning non-native songs as means of developing cultural understanding; and whether making up songs is equally possible in children and older persons (of possible interest in curriculum development for subtheme 3.2 on intergenerational understanding. Work under 1.3 will contribute to understanding of human development and language development, and will form the basis for appreciating what is possible in regard to sharing culture through singing, or teaching through singing. The work may lead to a commercially viable screening test of singing abilities, and already a contest has emerged from it.
10. Please describe expected or potential contributions of audiovideo or text materials that your sub-theme will be providing for research or pedagogical use in the AIRS digital library, or indicate the use members of your sub-theme expect to make of the digital library, if that is clear now.

Audiovisual sessions – components 1 – 11 from administration of the battery

11. Please provide the names of any students supervised by members of your subtheme, indicating if they were supported by AIRS. Please distinguish between student research support and student travel support, as there were 2 different programs. Expand or reduce number of rows if needed.

Please identify an undergrad student as U, master’s student as M, PhD as PhD, Post-doc as PDF, Research Associate as RA, Other as Oth. If all of the information is not available to you, please insert * or ? to indicate missing information.

<table>
<thead>
<tr>
<th>Student name, supervisor and brief project description</th>
<th>Category of Student: see above U, M, Ph.D., PDF, RA or Oth</th>
<th>Funded by AIRS (in part or total for research or for travel)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student name, supervisor and brief project description</td>
<td>Category of Student: see above U, M, Ph.D., PDF, RA or Oth</td>
<td>Funded by AIRS (in part or total for research or for travel)</td>
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</table>

See elsewhere for information

12. Please provide complete bibliographic information for any of the following types of dissemination arising from your work related to AIRS from April 1, 2010 to March 31, 2011 – we are particularly interested in work that would not have been carried out without the AIRS project. Some categories below are more relevant to certain themes than others.

a) Review articles published or in progress

b) Workshops presented, or accepted for presentation
   AIRS Annual Meeting in Seattle - Held afternoon workshop - attended by 12 - and ended with working dinner attended by 8

c) Recordings (CD, DVD)
   Distributed DVD of AIRS test battery to 25 AIRS members

d) Oral Presentations or Poster Presentations (please distinguish)

   An oral presentation was made at the conference on Creativity and Learning (Keane University) (Cohen, 2010) focusing on component to make up a song.
A poster was presented at the Canadian Psychological Association in Manitoba (McIver & Cohen, 2010) focusing on the differences between Chinese and Canadian students.

A talk was presented on the involvement of memory in singing at a symposium on memory at the Canadian Psychological Association in Manitoba (Cohen, 2010)


A poster was accepted for presentation at the Society for Music Perception and Cognition, Rochester, August, 2011 (Stevenson, Pan, Lane, & Cohen)


Forrester, M. (awaiting confirmation) A poster presentation will be made at the British Psychological Society Annual Conference describing this work (September – )


Ross, J. (2010). Introducing AIRS project by oral presentation at interdisciplinary scientific discussion seminar of voice research at Tallinn University in March 2011

e) Symposia organized (and presented)

f) Proceedings papers published or in press


g) Articles published, in press, or accepted for publication

   Application of the protocol for cross-cultural research in singing to the native speakers of Estonian” which was submitted to Trames (a journal of social sciences and humanities published by the Estonian Academy of Sciences) in April 2011


h) Book chapters published or in press, or submitted (please distinguish)
An invited article on Vocal improvisation: is there a critical period? was by A. J. Cohen for a book on Creativity and Music (Hargreaves, Miell & MacDonald, in press) which refers to (introduces) the AIRS test battery as a means of obtaining information on creativity.

i) Books or monographs published, or in press, or for which you have received a contract

*Psychomusicology: Music, Mind & Brain* Special Volume on Singing (co-editors Cohen & Trehub), in progress refers to test Battery in the Introduction to the volume by A. J. Cohen

j) Edited volumes of a journal published or in press (Edited books would go in the above category)

k) Choirs or singing groups created, or concerts of special interested organized (and recorded)

l) Choir or music festivals or related festivals organized having an AIRS component

m) Singing games created

A game/quiz Melody on the spot required contestants at the East Coast Music Awards to select one of 4 pictures and sing the first song that came to mind (those involved were the UPEI team, led by Denise Beaton, undergrad student).

n) working paper

A working paper (27 pages) was produced by Anick Lamarche focusing on the component involving learning a new song.

*Raju, M. and Ross, J. (submitted in April 2011). Application of the protocol for cross-cultural research in singing to the native speakers of Estonian.* Before submitting, the manuscript was sent to Dr. Annabel Cohen.

o) Other category not mentioned above

Competition based on Test Battery - Melody on the Spot (Denise Beaton & A Cohen) for ECMA

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13 Theses: Please indicate whether during Year 2, there were any student theses under supervision by members of your sub-theme in progress or completed at the Undergraduate, Master’s or Doctoral level with a topic directed toward addressing one or more of the goals of AIRS.

Undergraduate: honours
Name: Alexis McIver
Department: Psychology
University: University of Prince Edward Island
Supervisor: Annabel Cohen
Undergraduate visiting student
Name: Lauren Mitchell (co-supervised)
Department: Psychology
University: Kalamazoo College
Co-Supervisor: Annabel Cohen

Undergraduate visiting student
Name: Kamille LaRosa (co-supervise)
Department: Psychology
University: Kalamazoo College
Co-Supervisor: Annabel Cohen

Undergraduate honours
Name: Leah Stevenson
Department: Psychology
University: University of Prince Edward Island
Supervisor: Annabel Cohen

Undergraduate honours
Name: Emma Borthwick-Hunter
Department: Psychology
University: Kent
Supervisor: Michael Forrester

Undergraduate honours
Name: Undergraduate honours
Department: Psychology
University: Kent
Supervisor: Michael Forrester

Degree Level: Undergraduate honours
Name:
Department: Psychology
University: St. Francis Xavier
Supervisor: Jennifer Sullivan

Degree Level: Undergraduate project
Name: Degree Level: Undergraduate honours
Department: Psychology
University: Wellesley University
Supervisor: Psyche Loui

Department: Psychology
University: St. Francis Xavier
Supervisor: Jennifer Sullivan
<table>
<thead>
<tr>
<th>Degree Level - Doctoral in progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name: Marju Raju</td>
</tr>
<tr>
<td>Department: Musicology (?)</td>
</tr>
<tr>
<td>University: Estonia</td>
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<tr>
<td>Supervisor: Jaan Ross and Stefanie Stadler Elmer</td>
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<table>
<thead>
<tr>
<th>Degree Level - Masters in progress (tested 45 5 year olds)</th>
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<tbody>
<tr>
<td>Name: Bryndis Baldvinsdottir,</td>
</tr>
<tr>
<td>Department: Music Education</td>
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<tr>
<td>University: Iceland</td>
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<tr>
<td>Supervisor: Helga Gutmonsdottir</td>
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<tr>
<th>Degree Level - Postdoctoral</th>
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<tr>
<td>Name: Bing-Yi Pan</td>
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<tr>
<td>Department: Psychology</td>
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<tr>
<td>University: UPEI</td>
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<tr>
<td>Supervisor: Annabel Cohen</td>
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14. Please describe any unique training experiences offered your students as a result of the AIRS project.

- Hands-on research
- testing participants
- analysis of acoustic signals
- familiarization with audiovisual electronic media
- pitch analysis tools – Praat, and Stadler Elmer program
- statistical analysis
- being part of a very large project
- oral presentation
- conference development
- learning from other students
- writing
- bibliographic research
- principles of digital library (segmentation of data)

15 – summary of selected deliverables (please see what is listed for your sub-theme in the Milestone document)
**Deliverables:** Showing Estimated total for 3.5 years and number produced in Year 1

<table>
<thead>
<tr>
<th>Deliverables</th>
<th>Rev Articles</th>
<th>Workshops</th>
<th>Recordings</th>
<th>Presentations</th>
<th>Symposia</th>
<th>Proc Papers</th>
<th>Articles published</th>
<th>Book Chapters</th>
<th>Books or Monographs</th>
<th>Edited Volumes</th>
<th>Games</th>
</tr>
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<tbody>
<tr>
<td>Estimated in Milestone</td>
<td>1</td>
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<td>10</td>
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<td>Actual Year 2</td>
<td>1</td>
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<td>1</td>
<td>9</td>
<td>(2)</td>
<td>(2) + 3</td>
<td>(1) Reference made to battery</td>
<td>(1) In planning as part of a volume</td>
<td>1 contest</td>
<td>1</td>
<td></td>
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</table>
AIRS Annual Report Year 2 for Theme 2.1:  
Singing and Education, Learning to Sing Informally  
April 1, 2010 to March 31, 2011

2.1 Sub-Theme Collaborators
Patricia Campbell - Team Leader and Theme 2 Leader  
Martin Gardiner  
Helga Gudmundsdottir  
Beatriz Ilari  
Caroline Van Niekerk  
Kati Szego  
Graham Welch  

2.1 Milestone Activities
Reviews of literature (on children’s music and transmission processes, on vocalization by instrumentalists)
Fieldwork in Chamwino, Tanzania, on Wagogo children’s indigenous repertoire (by Kedmon Mapana, deposited to AIRS 3/31/11)
Review, transcription, analysis of children’s music within online archives, including Smithsonian Folkways, Association for Cultural Equity, Library of Congress (by Christopher Roberts, deposited to AIRS 3/31/11)

2.1 Members at Seattle AIRS meeting
Patricia Campbell  
Helga Gudmundsdottir  
Beatriz Ilari  
Caroline Van Niekerk  
Graham Welch

2.1 Members with Research Time Stipend
-0-

2.1 Member/Chair Additional Responsibilities
Patricia Campbell, member of AIRS Steering Committee  
member, Policy and Planning Committee  
Caroline Van Niekerk, chair, Global group  
Member, Policy and Planning Committee

Students Supervised by 2.1 Member in AIRS Projects
Christopher Roberts, by Patricia Campbell  
PhD, Music, University of Washington ($7,000 2010-11)  
Kedmon Mapana, by Patricia Campbell  
PhD, Educational Leadership, Seattle Pacific University ($7,000 2010-11)  
[Visiting Artist, University of Washington]
Summary: Deliverables

2009-10
Chessin, Ethan, and Patricia Campbell: From Audiation to Yukpo: Vocalizations in World Instrumental Traditions
* Presentation, AIRS-Seattle
* Presentation (brief), ICMPC-Seattle
* Presentation, ISME-Beijing
* Submitted to the British Journal of Music Education, no decision
Perdue, Megan, and Patricia Campbell: Musical Matters in the Songs Children Sing
* Presentation, AIRS-Seattle
* Presentation (brief), ICMPC-Seattle
* Presentation, ISME-Beijing
* Submitted to Research Studies in Music Education, revisions recommended

2010-11
Mapana, Kedmon: Traditional Children’s Songs of the Wagogo of Central Tanzania: Collection, Analysis, and Interpretation
* Submission, AIRS archive and website
* Presentation, AIRS-Newfoundland
* Performance, AIRS-Newfoundland
Roberts, Christopher: Children Singing Online: An Examination of Internet-Based Resources of Children Singing throughout the World
* Submission, AIRS archive and website
* Presentation, AIRS-Newfoundland
* Presentation, The Phenomenon of Singing-Newfoundland
AIRS 2.2 REPORT
D. Edwards (Theme Leader)
C. Beynon

The preliminary investigations into the formal training of singing in Years 1 and 2 have been productive for providing a solid foundation for the work proposed in this document for Year 3. The findings from the initial literature reviews continue to develop and expand beyond our initial expectations. Simply stated, there is an abundance of English language resources about formal training in vocal and choral training, curriculum and pedagogy in the literature, and we will continue to analyze these findings throughout the entire project. At this point, we have focused primarily on vocal and choral practices and pedagogy from individualistic, Eurocentric lenses, but next year we will probe the literature through universal and culturally specific lenses. Colleagues in China's Central Conservatory and Capital Normal University (Beijing), and its Xi'an Conservatory of Music are poised to participate and contribute in the research and data collection. The same is true of the Federal University of Rio de Janeiro, Brazil. In addition, we note that while there is much literature about vocal and choral pedagogy, the number of refereed, highly-respected journals is minimal, and we are in the process of investigating appropriate fora for disseminating the findings from this significant study.

Our graduate student, Jason Noble, who has completed the lion’s share of the two literature reviews and analysis, has now completed his master’s at Western, and is applying for doctoral programs in Canada and the United States. He has expanded his background in the areas of vocal and choral formal training and is now thoroughly familiar with the literature, process and goals of AIRS, and it is our hope that he will be able to continue on as our research assistant. There is no doubt that his work in this area has had a significant impact on his growth and development as a composition student, and conversely in working with a composer, whose work focuses largely in choral composition.

For the past 2 ½ years, Edwards and Beynon have generally carried out the work of sub-theme 2.2 alone but we are pleased to note that Stephen Demorest has agreed in the last few days, to participate in the work of this area. We will be working with him to use his strengths in future research and development. Additionally, with her energetic artistic direction of the Vancouver International Song Institute, Rena Sharon has contributed to 2.2 through the inclusion of a Voice Pedagogy Forum in VISI 2010, which included Darryl’s description of the work of AIRS’ 2.2 mandate.

In Year 3, we will continue to analyse the data from the literature reviews and to contact international colleagues to search the literature in languages other than English. We anticipate four articles from the initial review which are in progress: two articles that analyse each literature review by themes, using a mixed methodological framework; and two articles that each focus on a specific issue that has arisen from each study. In the choral pedagogy analysis for example, we note that there is predominance of articles that focus on the male singing voice even though there are relatively few males who engage in singing, and recruiting males to sing is difficult. At first glance, it appears that the plethora of research has done little to improve that situation.

In addition, we are seeking out and identifying libraries of both audio and audiovisual examples of singing practice, curriculum and pedagogy in settings that require formal training. In Year 3 we will focus on the creation of a database of existing and created examples.

We have begun the ethical review to gather these materials and it is apparent that ethical consideration will require a great deal of time and sensitivity to be negotiated. The use of videotaping represents a
foundation of pedagogy that has been used extensively in the private voice studio and not so widely in the choral rehearsal room. The tapes will generate a variety of studies for this particular group with the primary outcome to look at various practices for achieving results in various aspects (e.g., breath support, phonation, resonance, development of vibrato, choral blend, etc). One plan and likely the first is to organize them into a pedagogical series to support teaching and learning in the studio and the rehearsal setting, perhaps also in performance.

Once appropriate ethical clearance is approved, some tapes could be made available for the larger AIRS group. However in order to gain ethical approval the use of these tapes would have to be clearly described for the ethical review committees at our respective universities. What empirical research others might do with these tapes is impossible to know by us and so those researchers would need to clearly identify what use they would make of these tapes.

As the AIRS work progresses, we see that our work is complementary to and an extension of the proposal as originally visualized.

OUTCOMES OF AIRS 2.2:

a) Review articles published or in progress


b) Workshops presented, or accepted for presentation
   Ontario Music Educators Association, annual meeting Nov 2010

c) Oral Presentations or Poster Presentations (please distinguish)
   Poster of 2.2: UWO, Faculty of Education, Faculty of Arts & Humanities, Faculty of Information & Media Studies

d) Book chapters published or in press, or submitted (please distinguish)

e) Choirs or singing groups created, or concerts of special interested organized (and recorded)
   Rehearsals and concert production of African Stories = Amabile Choirs
   Concert production of Eastern Odyssey: Music of India = Amabile Choirs
   Rehearsals and concert production of Music for Passion Week = Czech Boys Choir and Hradec Kralove Symphony Orchestra, CZ

f) Choir or music festivals or related festivals organized having an AIRS component
These are hard to define for me as I am in constant performance mode, and likely all reflect who I am in relation to research related to male singing, AIRS etc. For example, our little guys are on tour to festival 500 this summer and AIRS figures into their performances and repertoire chosen.

Lectures


Research in Progress


Refereed Publications

From Jane Ginsborg

    a) Oral Presentations or Poster Presentations (please distinguish)


    b) Symposia organized (and presented)

to symposium on musicians’ memory. International Conference on Multidisciplinary Research on Music Pedagogy, University of Ottawa, Canada, 26-30 May

c) Proceedings papers published or in press


d) Articles published, in press, or accepted for publication


e) Book chapters published or in press, or submitted (please distinguish)


3. Theme Number: Theme 2
   Theme Name: Singing and Education

4. Leader or Co-leaders name
   Andrea Rose
   Jenny Sullivan

   Leader of Co-leaders institution
   Memorial University of Newfoundland
   St. Francis Xavier University

3. Subtheme Collaborators: (do not include students here)

<table>
<thead>
<tr>
<th>Investigator Name</th>
<th>Investigator's Institution</th>
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<tbody>
<tr>
<td>Martha Gabriel</td>
<td>UPEI</td>
</tr>
<tr>
<td>June Countryman</td>
<td>UPEI</td>
</tr>
<tr>
<td>Henrietta Lempert</td>
<td>University of Toronto</td>
</tr>
<tr>
<td>Martin Gardiner</td>
<td>Brown University</td>
</tr>
<tr>
<td>Natalie Henrich</td>
<td>GIPSA-Lab Joseph Fourier University and the University Stendhal</td>
</tr>
<tr>
<td>Kati Szego</td>
<td>Memorial University of Newfoundland</td>
</tr>
</tbody>
</table>

4. (a) Milestone activities and (b) proposed deliverables and (c) what was delivered in Year 2.
   Please address each milestone grouping under a, b, and c, and then move on to the next milestone.
   Add or remove rows and lines as needed. Use the milestone document table as a reference found at www.airsplace.ca menu item - Resources

1. (a) review of literature on the use of singing and song in the teaching and learning of both music and non-music concepts, skills, perceptions and attitudes;
   (b) conference presentation and published article
   (c)

2. (a) Examination of e-contexts of K-12 music education and singing as a medium for teaching and learning specifically a case study of current and evolving e-music programmes in Newfoundland and Labrador through Centre for Distance Learning and Innovation (CDLI)
   (b) commence empirical study and data collection in the classroom
   (c)

3. (a); (3) Examination of male singing practices and developmental trends in the choral/educational context a case study with the Amabile Choir, London, Ontario;
4. (a) Study of elementary student attitudes toward singing, the role of repertoire choice and teachers’ perceptions of issues surrounding classroom singing – a case study at UPEI of music education students and local music teachers;
(b) Interviews, analysis of data, workshop and book chapter
(c)

5. (a) Study of teaching vocabulary in school-aged children and language development through singing;
(b) Conference presentation and paper
(c) Conference presentations at the AIRS annual meeting and AIRS regional workshop both in 2010, Undergraduate thesis completed.

6. (a) Examination of the use of singing to learn second or other foreign language perception and production of pronunciation, vocabulary, and grammar;
(b) Conference presentation and paper (on grammar); Conference presentation and thesis (On pronunciation)
(c) Grammar study – pilot project data collected.

7. (a) Study that will test effects of singing skill acquisition on broader academic skill learning.
(b) Measures of correlation; conference presentation
(c)

5. How many of the members of your sub-theme attended the 2nd Annual Meeting of AIRS in Seattle (if you know)? ___ Don't know ___X___

How many of your sub-theme members (only Canadian) received a Research Time Stipend in Year 2 (if you know) ___ Don't know ___X___

How much funding, in Year 2, was awarded to your sub-theme to support student research

$____________________ Don't know _X____

6. Item 4 above provides a brief description of the accomplishments of the sub-theme with respect to the milestones. Please describe any additional particular responsibilities, if any, that you would like to comment on high-lighting activities of your sub-theme or its member in Year 2 (e.g., supervision of student work; writing ethics review, liaising between AIRS and students) to assist reaching the Goals of AIRS and/or the goals of the sub-theme. If you feel this information is suitably provided in other sections of this report, please feel free to move on.

Lempert
Responsibilities: Principal investigator of my AIRS-related project: This work included designing the experiment, constructing research materials, writing the research proposal for ethics review, arranging for participation in the Introductory Psychology Research Participants Pool, recruiting students to work on the project, training and supervising three students who were supported by AIRS funding during the 2010-2011 academic year (Wendy Xin, Michal Chwalek, and Olga Shabnam), and liaising between AIRS and the students.

Sullivan
Supervised one undergraduate student thesis in year 2. Assisted in research with Petra Hauf (supervising another thesis student) on theme 1.2. Co-supervised an MA practicum. Liaised between AIRS and a new student (Robyn Wells) who will be working on AIRS research in year 3. Attended AIRS meetings as co-leader for 2.3 and as ethics representative.
**Countryman and Gabriel**  
Wrote a successful proposal to receive student RA funding from AIRS. Hired and supervised two undergraduate students to complete annotated bibliographies of literature on singing in formal contexts.

**Gabriel**  
Wrote ethics submission to the UPEI Research Ethics Board and received ethical approval to collect spontaneous singing in St. Vincent and the Grenadines.

8. Please describe the results your sub-theme has obtained or the nature of the information you sub-theme members were working toward obtaining in Year 2. Please be careful to distinguish between actual and hypothesized results. If the information is provided elsewhere in this document, please refer simply to that section or sections.

**Lempert**  
The project examines whether singing can facilitate learning the grammar of a novel language. Funding for student support was received in mid-August, 2010. By October, three undergraduate students with an interest in research in singing had been recruited to assist in recording stimuli for the project. They also were asked to devise a procedure whereby singing might cue learners to the grammar of the language. The initial version of the stimuli were recorded during November, but had to undergo several revisions in January. We began to collect pilot data at the beginning of March but had to stop towards the end of March (the end of the fiscal year). The pilot studies are intended to resolve issues such as the number of study trials required and various issues regarding the administration procedures.

**Sullivan**  
In year 2 we tested 16 children in two groups before and after intervention for teaching vocabulary words. Eight children heard the vocabulary in stories and 8 children in songs. The children in the singing group knew significantly more of the novel words after the singing intervention than the children in the story intervention group.

In the Ecuador project, Arla used a song to teach Spanish speaking children English words. She matched the song group to another group of children who learned the same passage as a poem. She found that the children in the song group could reproduce more of the lyrics than the poem group. They also knew the meaning of significantly more of the words. She also went back to Ecuador for a 6-month follow-up and found that children in the song group still remembered the song but the spoken group did not.

**Gabriel**  
My focus during Year 2 of the AIRS project was on obtaining digital recordings of adults’ and children’s music-making in St. Vincent and the Grenadines. These recordings are complete. The next step in the research process will be to collect digital recordings from younger children in early years centres, to explore more thoroughly the connections between musicking and literacies, and to collaborate with June Countryman to write about these connections. The research objectives of this project were:

- To video record music sung by residents from rural and “urban” areas in St. Vincent and the Grenadines; **COMPLETED**
- To transcribe and share these recordings with other AIRS researchers; **IN PROCESS**
- To create video vignettes that model for researchers and educators how song/musicking relates to literacy; **IN PROCESS**
- To highlight connections between musical roots and literacy, and share these connections through the video vignettes (a) with pre-service teachers who are learning about literacy in the classroom; (b) with other teachers; (c) with AIRS researchers; and (d) with researchers at academic conferences. **IN PROCESS**
**Countryman**
One gap that appears in the literature review on formal singing is that of addressing student engagement with singing in elementary school contexts. Why do many children lose enthusiasm for classroom singing as they move through the grades? What influence does repertoire choice play? Do pedagogical moves that increase students’ ownership over musical decision-making (e.g. improvising and composing opportunities; small-group arranging/rehearsing; developing movement routines) influence how students feel about singing? What influence does the popular music scene and singing-focused TV shows (*Glee; Idol*) play in students’ involvement with and enjoyment of group singing, and at what ages do these influences appear?

I suspect that the difficulty in getting ethics approval to collect students’ opinions about their school experiences helps to explain this research gap. I had imagined that this was a research area I would explore. (#4 of the research areas enumerated in the 2.3 Milestone description). However, the fact that I work with PEI music teachers in various PD initiatives and with student teacher supervision makes it difficult to initiate such an inquiry without creating the impression that teachers’ work is being scrutinized for deficits.

8. Please describe scholarly outcomes of your sub-theme’s work expected by next year or later. (if elsewhere in this form, please indicate where, and move on).

**Lempert**
We will know whether singing can be used to support post-puberty acquisition of the grammar of a second or third language, and if so, under what conditions it can do so.

**Countryman**
Working on a paper about teacher professional growth and the barriers to changing pedagogy, including the pedagogy of formal singing.

**Gabriel**
Working on a paper about *Singing and children’s music making in St. Vincent and the Grenadines*.

Also See 11

9. Please describe expected or potential contributions of audio/video or text materials that your sub-theme will be providing for research or pedagogical use in the AIRS digital library, or indicate the use members of your sub-theme expect to make of the digital library, if that is clear now.

**Lempert**
After the work is completed, we can contribute the stimuli

**Gabriel and Countryman**
Audio/video clips of children’s informal singing in a variety of school playground and ECE settings. Bibliography of research articles and materials (text).

**Sullivan**
The songs used for the singing intervention have been recorded for a CD to be distributed to the local daycare staff. The songs can also be placed in the digital library. A video recording of an example singing exercise with 4-year-old children has been recorded and will be added to the digital library once permissions are granted and/or children’s faces are obscured.
10. Please provide the names of any students supervised by members of your subtheme, indicating if they were supported by AIRS. Please distinguish between student research support and student travel support, as there were 2 different programs. Expand number of rows if needed (ignore extra ones, or remove).

Please identify an undergrad student as U, master’s student as M, PhD as PhD, Post-doc as PDF, Research Associate as RA, Other as Oth. If all of the information is not available to you, please insert * or ? to indicate missing information.

<table>
<thead>
<tr>
<th>Student name, supervisor and brief project description</th>
<th>Category of Student: see above U, M, Ph.D., PDF, RA or Oth</th>
<th>Funded by AIRS (in part or total for research or for travel)</th>
</tr>
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</table>
| **Lempert** Learning Grammar of Novel Language Through Singing:  
Michal Chwalek  
Wendy Xin  
Olga Shabnam  | U RA  
U RA  
U RA  | Yes  
Yes  
Yes |
| **Sullivan** Analyzing children’s singing data for pitch:  
Gregory MacLean  | U RA  | Yes |
| Vocabulary Development through singing: Developed new song materials, new vocabulary test materials, produced a CD of song materials, tested children in year 2 using the AIRS battery.  
Sarah Drake  
Study of children’s singing to learn a foreign language.  
Arla Good  | U  | Yes |
| **Countrymand and Gabriel** Developed an annotated bibliography of studies focused on using music to teach developmental skills and disciplinary content (non-music).  
Nikki Schieck  
Developed an annotated bibliography focused on extant research (mostly post-1990) devoted to teaching singing in formal school settings.  
Kelly Leighton  | U  | Yes |
| **U**  | Yes |

11. Please provide complete bibliographic information for any of the following types of dissemination arising from your work related to AIRS from April 1, 2010 to March 31, 2011—we are particularly interested in work that would not have been carried out without the AIRS project. Some categories below are more relevant to certain themes than others.

p) Workshops presented, or accepted for presentation
**Countryman** Presented workshops for music teachers focused on elementary school singing, in Ontario, PEI and Nova Scotia (7 in total). These would have happened without the AIRS project

q) Recordings (CD, DVD)

r) Oral Presentations or Poster Presentations (please distinguish)

Posters:

Oral Presentations:

**Countryman** Joint presentation on the AIRS initiative at UPEI’s Research Forum, sponsored by the Centre for Educational Research, April 14, 2010

**Gabriel** did an oral presentation of Singing: Exploring Roots and Literacies at A Vocal Mosaic of AIRS, the second regional workshop, on August 12, 2010. This presentation would not have happened without the AIRS project.

s) Articles published, in press, or accepted for publication

t) Choirs or singing groups created, or concerts of special interested organized (and recorded)
**Countryman** conducted the mass elementary grades choir for the Music Monday Celebration (May 2, 2011) [would have happened without AIRS]

u) Other category not mentioned above
Sullivan Children’s play songs created – 10 novel songs were created for Sarah Drake’ thesis.
**Countryman and Gabriel** Annotated bibliographies our undergraduates developed on the AIRS website, if this is appropriate

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12 Theses: Please indicate whether during Year 2, there were any student theses under supervision by members of your sub-theme in progress or completed at the Undergraduate, Master’s or Doctoral level with a topic directed toward addressing one or more of the goals of AIRS.

Undergraduate: **Sullivan** Supervisor
Name: Sarah Drake
Department Psychology
University St. Francis Xavier

Doctoral: **Countryman** Committee Member
Name: Verne Lorway
Verne is investigating issues of informal musicking at the secondary level, using a number of theoretical lenses. Singing is one of the practices she will be documenting.

13. Please describe any unique training experiences offered your students as a result of the AIRS project.

**Gabriel:** I teach Language Arts in the Middle Years to pre-service teachers in the Faculty of Education, UPEI. During the winter semester, I began every class session of this course with a piece of music and a request that students respond to the music in their writing. The resultant poetry/writing was shared and discussed on a social networking site. At the end of the course, when the pre-service teachers submitted their final assignment (a language arts unit that they would teach during their teaching practicum), a large number of the students spontaneously included lessons integrating music and singing into their unit. I intend to investigate this phenomenon more closely during academic year 2011-2012, to explore the impact of music and singing on the pre-service teachers, and on the children in their practicum classrooms.

14 – summary of selected deliverables (please see what is listed for your sub-theme in the Milestone document)

**Deliverables:** Showing Estimated total for 3.5 years and number produced in Year 1

<table>
<thead>
<tr>
<th></th>
<th>Rev Articles</th>
<th>Workshops</th>
<th>Recordings</th>
<th>Presentations</th>
<th>Symposia</th>
<th>Proc Papers</th>
<th>Articles published</th>
<th>Book Chapters</th>
<th>Books or Monographs</th>
<th>Edited Volumes</th>
<th>Choirs</th>
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15. Any other comments you would like to make (use as much space as you wish).
AIRS Annual Report Year 2  Sub-theme _3.1___  Date: June 5, 2011
For the time period April 1, 2010 to March 31, 2011
Send to acohen@upei.ca, dannear@upei.ca by July 5, noon EST

<table>
<thead>
<tr>
<th>5. Theme Number: Theme 3__</th>
<th>Sub-theme Number: Sub-theme <em>3.1</em>_</th>
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<tbody>
<tr>
<td>Theme Name: Well-Being</td>
<td>Sub-theme Name: Cultural Understanding</td>
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<tr>
<th>6. Leader or Co-leaders name</th>
<th>Leader of Co-leaders institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Godfrey Baldacchino</td>
<td>UPEI</td>
</tr>
<tr>
<td>Lily Chen-Hafteck</td>
<td>Kean University</td>
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3. Subtheme Collaborators: (do not include students here)

<table>
<thead>
<tr>
<th>Investigator Name</th>
<th>Investigator's Institution</th>
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<tbody>
<tr>
<td>Felix Neto</td>
<td>University of Portu, Portugal</td>
</tr>
<tr>
<td>Annabel Cohen</td>
<td>UPEI</td>
</tr>
<tr>
<td>Larry O’Farrell</td>
<td>Queen’s University</td>
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<tr>
<td>Joan Russell</td>
<td>Retired from McGill</td>
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<tr>
<td>Frank Russo</td>
<td>Ryerson</td>
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<td>Richard Parn cunt</td>
<td>Graz</td>
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4. (a) Milestone activities and (b) proposed deliverables and (c) what was delivered in Year 2. Please address each milestone grouping under a, b, and c, and then move on to the next milestone. Add or remove rows and lines as needed. Use the milestone document table as a reference found at www.airsplace.ca menu item - Resources

5. How many of the members of your sub-theme attended the 2nd Annual Meeting of AIRS in Seattle (if you know)? ___ Don't know ___X___

How many of your sub-theme members (only Canadian) received a Research Time Stipend in Year 2 (if you know) ___ Don't know ___X___

How much funding, in Year 2, was awarded to your sub-theme to support student research $___________________ Don't know ___X___
6. Item 4 above provides a brief description of the accomplishments of the sub-theme with respect to the milestones. Please describe any additional particular responsibilities, if any, that you would like to comment on high-lighting activities of your sub-theme or its members in Year 2 (e.g., supervision of student work; writing ethics review, liaising between AIRS and students) to assist reaching the Goals of AIRS and/or the goals of the sub-theme. If you feel this information is suitably provided in other sections of this report, please feel free to move on.

The cross-cultural research study on cultural understanding led by Lily Chen-Hafteck is making steady progress. Having coordinated among researchers and students from four countries (Brazil, Canada, China and Kenya), the planning and preparation of the study is near to completion. The application for ethics approval to start the project in 8 schools from the four countries in September, 2011 is in progress. At this stage, a song book compiling 24 traditional songs and their background information together with a demonstration video from the four countries are at the final stage of editing. They will serve as teaching materials for the study. Joan Russell has provided advice to the Canadian song materials. A workshop for the eight international student-researchers participating in the project has been organized during the AIRS annual meeting in Newfoundland. These students have received funding from AIRS to assist in their travel. A session on the project’s song book materials will be presented by Lily Chen-Hafteck and the international student-researchers at the Phenomenon of Singing Symposium.

Godfrey Baldacchino has submitted a manuscript of his edited book on research in Island Songs to Scarecrow Press. Annabel Cohen has written the prefatory remarks for the book.

Felix Neto is completing his field work on cross-cultural singing intervention in Portugal. The subjects are 200 children ages 10-12 who attend public schools near Lisbon. Half of the subjects followed the ordinary music program learning Portuguese songs (the control group) whereas the remaining half of the subjects were exposed to 20 sessions of a cross-cultural music program that include learning Cape Verdean songs (the experimental group). There were two testing sessions on children’s ethnic attitudes: one in October 2010, before the beginning of the program; and the other in April 2011, just after its completion. A follow up (three months after the end of the program) will be implemented in June 2011. Thus, all the data will be available very soon and during Year 3, these data can be analyzed and a report/paper can be provided with the results of this intervention.

Annabel Cohen reported that the international choir has had minimal success. The plan was to create a small choir first. However this did not really get off the ground. Some software from Chuala for learning to speak foreign languages was reviewed for possible use by choir members for learning new songs. The plan is to continue in pursuing this and to begin again in September with the international choir notion. It was discovered that it is very difficult to learn songs of another culture, but the group believes that it can be done, and it can be fun. So they are committed to making this work. There is a small amount of funding to hire two students to help with the choir (directing and accompanying) and these jobs should be posted prior to September this year.

Larry O’Farrell’s main responsibility was in the area of dissemination – editing the UNESCO Observatory Journal special issue on Singing. His work as UNESCO Chair for Arts and Learning involved him in many other activities that related to the AIRS project. Of these, he has included the most important which was his role as General Rapporteur for the 2nd UNESCO World Conference on Arts Education held in Seoul, Republic of Korea, and his responsibility for preparing the Seoul Agenda: Goals for the development of arts education which was endorsed by the UNESCO Executive Council in October of 2010.

7. Please describe the results your sub-theme has obtained or the nature of the information you sub-theme members were working toward obtaining in Year 2. Please be careful to distinguish between actual and hypothesized results. If the information is provided elsewhere in this document, please refer simply to that section or sections.
8. Please describe scholarly outcomes of your sub-theme’s work expected by next year or later. (if elsewhere in this form, please indicate where, and move on).
   - Publication of Godfrey Baldacchino’s edited book
   - Complete of data collection and analysis of Neto’s and Chen-Hafteck’s research projects

9. Please describe expected or potential contributions of audio/video or text materials that your sub-theme will be providing for research or pedagogical use in the AIRS digital library, or indicate the use members of your sub-theme expect to make of the digital library, if that is clear now.
   - The AIRS Quadcultural Songbook: Brazil, Canada, China, and Kenya and the demonstration video.

10. Please provide the names of any students supervised by members of your subtheme, indicating if they were supported by AIRS. Please distinguish between student research support and student travel support, as there were 2 different programs. Expand number of rows if needed (ignore extra ones, or remove).

<table>
<thead>
<tr>
<th>Student name, supervisor and brief project description</th>
<th>Category of Student: see above U, M, Ph.D., PDF, RA or Oth</th>
<th>Funded by AIRS (in part or total for research or for travel)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connie Taylor, supervised by Larry O’Farrell</td>
<td>Ph.D.</td>
<td>N.A.</td>
</tr>
<tr>
<td>Reflections on the purpose and structure of the Artist in Community Education Program at Queen’s University: A Case Study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The study was proposed and will be funded by the Arts Network for Children and Youth (ANCY), a non-governmental, not for profit organization that has identified ACE as an exemplary program in the preparation of artists (including musicians and singers) as teachers. The ACE program has also been recognized as exemplary by UNESCO, which included a description of the program in its 2006 “UNESCO Roadmap for Arts Education”, and by the Globe and Mail Newspaper that lists ACE as one of seven noteworthy education programs in Canada. (Globe and Mail, 2010). ANCY has received a grant from the Ontario Trillium Foundation to advance its work in community development in bringing arts experiences to young people across Canada. One objective of this work is to encourage the development of high quality programs in the preparation of artist-educators. Recognizing the ACE program as one of the few initiatives of its kind that specifically includes a community component, ANCY seeks to illuminate the purpose and structure of ACE with a view to applying insights to the enhancement of the program at Queen’s University and to the further</td>
<td></td>
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</tbody>
</table>
development of artist-educator training programs elsewhere.

11. Please provide complete bibliographic information for any of the following types of dissemination arising from your work related to AIRS from April 1, 2010 to March 31, 2011 – we are particularly interested in work that would not have been carried out without the AIRS project. Some categories below are more relevant to certain themes than others.

v) Review articles published or in progress
Lily Chen-Hafteck:

w) Workshops presented, or accepted for presentation
Lily Chen-Hafteck:
- *Understanding Cultures, Singing Songs: Let’s learn about Brazil, Canada, China and Kenya!* Workshop accepted for presentation at the Phenomenon of Singing International Symposium, St. John’s, Newfoundland, Canada, July 10-13, 2011.

x) Recordings (CD, DVD)
N.A.

y) Oral Presentations or Poster Presentations (please distinguish)
Lily Chen-Hafteck:

Larry O’Farrell:

z) Symposia organized (and presented)
Lily Chen-Hafteck:
  - Chaired by Lily Chen-Hafteck; panelists included Mayumi Adachi, Caroline Van Niekerk, Andrea Rose, Patricia Shehan Campbell (in absentia), Ethan Chessin (in absentia), and Megan Perdue (in absentia).

Larry O’Farrell:
- Canadian Network for Arts and Learning, National Symposium, Winnipeg, Dec. 2,3,4 2010

aa) Proceedings papers published or in press


bb) Articles published, in press, or accepted for publication


cc) Proceedings papers published or in press

N.A.

dd) Articles published, in press, or accepted for publication


ee) Book chapters published or in press, or submitted (please distinguish) N.A.

ff) Books or monographs published, or in press, or for which you have received a contract


gg) Edited volumes of a journal published or in press (Edited books would go in the above category)

Larry O’Farrell, Guest Editor:


hh) Choirs or singing groups created, or concerts of special interested organized (and recorded)

- preliminary attempt to create multicultural choir - UPEI

ii) Other category not mentioned above
12 Theses: Please indicate whether during Year 2, there were any student theses under supervision by members of your sub-theme in progress or completed at the Undergraduate, Master’s or Doctoral level with a topic directed toward addressing one or more of the goals of AIRS.

N.A.

13. Please describe any unique training experiences offered your students as a result of the AIRS project.

Lily Chen-Hafteck has organized a workshop for all student-researchers participating in the AIRS International Project on Cultural Understanding, that will take place on 9 July 2011 in St. John’s, Newfoundland, Canada. Student participants will include:

- Nancy Gleason, Kean University, USA
- Zuraida Abud Bastião, Federal University of Bahia, Brazil
- Angelita Broock, Federal University of Bahia, Brazil
- Kelly Gillis, University of Prince Edward Island, Canada
- Arla Good, Ryerson University, Toronto, Canada
- Bing-Yi Pan, University of Prince Edward Island, Canada
- Yue Xiao, China Conservatory of Music, China
- Elizabeth Andang’o, Kenyatta University, Kenya

14 – summary of selected deliverables (please see what is listed for your sub-theme in the Milestone document)

**Deliverables:** Showing Estimated total for 3.5 years and number produced in Year 1

**Lily Chen-Hafteck:**

<table>
<thead>
<tr>
<th></th>
<th>Rev Articles</th>
<th>Workshops</th>
<th>Recordings</th>
<th>Presentations</th>
<th>Symposia</th>
<th>Proc Papers</th>
<th>Articles published</th>
<th>Book Chapters</th>
<th>Books or Monographs</th>
<th>Edited Volumes</th>
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**Larry O’Farrell:**

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Very significant - Book publication of Baldacchino
7. Theme Number: 3.2 Theme__
   Theme Name: Intergenerational Understanding

8. Leader or Co-leaders name
   Rachel Heydon

3. Subtheme Collaborators: (do not include students here)

<table>
<thead>
<tr>
<th>Investigator Name</th>
<th>Investigator's Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carol Beynon</td>
<td>The University of Western Ontario</td>
</tr>
<tr>
<td>Susan O’Neill</td>
<td>Simon Fraser University</td>
</tr>
<tr>
<td>Mary Gick</td>
<td>Carleton University</td>
</tr>
</tbody>
</table>

4. (a) Milestone activities and (b) proposed deliverables and (c) what was delivered in Year 2.
   Please address each milestone grouping under a, b, and c, and then move on to the next milestone.
   Add or remove rows and lines as needed. Use the milestone document table as a reference found at www.airsplace.ca menu item - Resources

1. (a) Review of Literature
   (b) Presentation
   (c) Milestone Achieved: See Section 11

2. (a) Site Visits
   (b) Reports of Sites
   (c) Milestone Achieved—Site Selected for implementation of program plus, existing IG singing program site in Vancouver studied

3. (a) Establishment of Prototype
   (b) Written Pilot Protocol
   (c) Milestone Achieved-IG singing curriculum prototype written and implemented Winter 2011 also, interview protocols for study developed and piloted in Vancouver and London

4. (a) Recording and Study of Benefits
   (b) Report Benefits and Compare with Art
   (c) Research Questions were addressed and reported (see section 11), comparisons with Vancouver site begun, and interview data transcribed and analysed

5. (a) Replicate at Same Site
   (b) Report on New Participants
   (c) Milestones document lists this as beginning toward the end of year 2 and into year 3. To better achieve goal of study, a new southwestern Ontario site has been identified, ethics has been submitted, and implementation of program will begin with new school year. (Note that studies so far indicated a need for the protocol to be implemented in a site with limited IG and singing experience to identify ease of adoption of protocol for future
similar sites.)

6. (a) Analysis of Data
   (b) Determine Results are Worthy of Report
   (c) Preliminary data analysis has been completed, reporting commenced (see section 11), and more analysis is ongoing

7. (a) Presentation of Results
   (b) Present Results at Major Meeting
   (c) Milestone achieved—see section 11

5. How many of the members of your sub-theme attended the 2nd Annual Meeting of AIRS in Seattle (if you know)? __3 + student_ Don't know _____
   How many of your sub-theme members (only Canadian) received a Research Time Stipend in Year 2 (if you know) ___ Don't know ___x__(Heydon received RTS-O’Neill changed institutions and received RTS towards )
   How much funding, in Year 2, was awarded to your sub-theme to support student research $__________________ Don't know ___x__

6. Item 4 above provides a brief description of the accomplishments of the sub-theme with respect to the milestones. Please describe any additional particular responsibilities, if any, that you would like to comment on high-lighting activities of your sub-theme or its member in Year 2 (e.g., supervision of student work; writing ethics review, liaising between AIRS and students) to assist reaching the Goals of AIRS and/or the goals of the sub-theme. If you feel this information is suitably provided in other sections of this report, please feel free to move on.
   See #4

7. Please describe the results your sub-theme has obtained or the nature of the information you sub-theme members were working toward obtaining in Year 2. Please be careful to distinguish between actual and hypothesized results. If the information is provided elsewhere in this document, please refer simply to that section or sections.

   Preliminary data analysis indicates positive results for curriculum and some areas that we need to address in the curriculum to strive toward inclusivity of participants and ease of adoption of protocol. Preliminary comparison of programs also suggests pilot IG singing curriculum better facilitates IG relationship-development than pre-existing scripted singing activity.

8. Please describe scholarly outcomes of your sub-theme’s work expected by next year or later. (if elsewhere in this form, please indicate where, and move on).

   We expect to have firm results regarding what the curriculum creates and how it can most easily be disseminated for implementation by people who have little experience with IG and/or singing programs by winter so that program can then be attempted in Ottawa.

9. Please describe expected or potential contributions of audiovideo or text materials that your sub-theme will be providing for research or pedagogical use in the AIRS digital library, or indicate the use members of your sub-theme expect to make of the digital library, if that is clear now.

   We hope to have better equipment in the next iteration of the curriculum to facilitate a contribution.

10. Please provide the names of any students supervised by members of your subtheme, indicating if they were supported by AIRS. Please distinguish between student research support and student travel support, as there were 2
different programs. Expand number of rows if needed (ignore extra ones, or remove).

Please identify an undergrad student as U, master’s student as M, PhD as PhD, Post-doc as PDF, Research Associate as RA, Other as Oth. If all of the information is not available to you, please insert * or ? to indicate missing information.

<table>
<thead>
<tr>
<th>Student name, supervisor and brief project description</th>
<th>Category of Student: see above U, M, Ph.D., PDF, RA or Oth</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Student name, supervisor and brief project description</td>
<td>PhD</td>
<td>Research Assistant on AIRS southwestern Ontario (paid for by UWO)</td>
</tr>
<tr>
<td>Wendy Crocker, Rachel Heydon, IG singing curriculum (helped to develop and implement curriculum—was the lead teacher at site)</td>
<td>PhD</td>
<td>Research Assistant on AIRS southwestern Ontario (paid for by AIRS)</td>
</tr>
<tr>
<td>Student name, supervisor and brief project description</td>
<td>PhD</td>
<td>Research Assistant on AIRS Vancouver (paid for by AIRS)</td>
</tr>
<tr>
<td>Terry Loerts, Carol Beynon, IG singing curriculum (assisted with data collection during implementation of IG singing curriculum)</td>
<td>PhD</td>
<td>Research Assistant on AIRS Vancouver (paid for by AIRS)</td>
</tr>
<tr>
<td>Student name, supervisor and brief project description</td>
<td>M.A.</td>
<td>Research Assistant on AIRS Vancouver (paid for by AIRS)</td>
</tr>
<tr>
<td>Paul Boissonault, Susan O’Neill, AIRS Vancouver</td>
<td>PhD</td>
<td>Research Assistant on AIRS southwestern Ontario (paid for by AIRS)</td>
</tr>
<tr>
<td>Student name, supervisor and brief project description</td>
<td>PhD</td>
<td>Research Assistant on AIRS southwestern Ontario (paid for by AIRS and AIRS travel award)</td>
</tr>
<tr>
<td>Kara Lipsett, Susan O’Neill, AIRS Vancouver</td>
<td>PhD</td>
<td>Research Assistant on AIRS southwestern Ontario (paid for by AIRS)</td>
</tr>
<tr>
<td>Zheng Zhang, Rachel Heydon, assisted in southwestern Ontario</td>
<td>PhD</td>
<td>Research Assistant on AIRS southwestern Ontario (paid for by AIRS and AIRS travel award)</td>
</tr>
</tbody>
</table>

11. Please provide complete bibliographic information for any of the following types of dissemination arising from your work related to AIRS from April 1, 2010 to March 31, 2011—we are particularly interested in work that would not have been carried out without the AIRS project. Some categories below are more relevant to certain themes than others.

a) Workshops presented, or accepted for presentation

   Beynon, C. Ontario Music Educators Association, annual meeting Nov 2010


**jj) Oral Presentations or Poster Presentations (please distinguish)**


**kk) Symposia organized (and presented)**


Heydon, R. (under review). *Learning at the ends of life.* Toronto: University of Toronto Press. (Note that the manuscript has not yet received a contract as the book is still at the publications committee level, but all reviews were very positive with recommendations to publish.)

13. Please describe any unique training experiences offered your students as a result of the AIRS project.

Engagement with: multi-phase program and curriculum development and research, field work, data analysis, IG learning and singing phenomena, interdisciplinary research (including singing performance, psychology of music, curriculum studies), preparation of manuscripts for publication and presentation, AIRS network

Also, Wendy Crocker was able to teach a program.
14 – summary of selected deliverables (please see what is listed for your sub-theme in the Milestone document)

**Deliverables:** Showing Estimated total for 3.5 years and number produced in Year 1

<table>
<thead>
<tr>
<th></th>
<th>Rev Articles</th>
<th>Workshops</th>
<th>Recordings</th>
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<td>2</td>
<td>3</td>
<td>1 (under review)</td>
<td>0</td>
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</tbody>
</table>

15. Any other comments you would like to make (use as much space as you wish).

Please also note that in addition to the deliverables cited above, the project has thus far also created and implemented an IG singing curricula that is still ongoing in a shared site. Participants have now benefitted from five months of programming and this programming will continue. Educators and recreation therapists at the site have also benefitted from our training.

Please also note that the program development and implementation were very intensive. We will now have the space to work with the data to focus on producing the deliverables listed in section 14.
AIRS Annual Report Year 2 Sub-theme 3.3
Singing & Health
Prepared by: Jennifer Nicol
(April 1, 2010 to March 31, 2011)

Sub-Theme Members

Mary Gick (Co-leaders)
Stephen Clift
Laurel Young
Kay Kleinerman
Rena Sharon
Gottfried Schlaug
Janice Richman-Eisenstat
Chris Blanchard
Jennifer Nicol (Co-leaders)

Year 2 Milestones and Deliverables

1. (a) illness specific intervention research
(b)
(c) involvement of 2 AIRS members in externally funded projects; Clift and Nicol are talking/networking/sharing information around parallel studies; recently had discussion involving UofS nursing principal investigator, Goodridge, and hopeful that both Nicol and Goodridge will meet with Clift in England during 2011-2012.
(c) Gick proposal developed, submitted and funded for 2011-2012 study of singing and students with asthma
2. (a) literature reviews
(b)
3. (a) Singing clubs for seniors
(b)
(c) keeping apprised of Nigel Brown’s work in bringing a UK program, Sing for Your Life, to Canada (Kelowna, BC), which is a free participatory music program for older individuals who are living independently
4. (a) Secondary School programming
(b)
(c) University of Saskatchewan doctoral student, Jean Emmerson, continued progress on dissertation research on a school-delivered program for teen mothers and their infants
5. (a) Alzheimer’s protocols
(b)
(c) Gick student’s (Busch) project on caregivers’ feedback on singing and health/wellbeing
associations in nursing home residents with dementia
(c) New AIRS stakeholder, Clementes-Cortes (Windsor) who is currently involved in a 16-week singing program for elderly, including those with dementia
6. (a) Language Rehabilitation
(b)
(c) continued opportunity for student to visit lab of G. Schlaug
7. (a) Later Life Singing Lessons
(b) ?
(c) ?
5. How many of the members of your sub-theme attended the 2nd Annual Meeting of AIRS in Seattle (if you know)? _4 (Nicol, Gick, Sharon, Kay)_ Don’t know _____

How many of your sub-theme members (only Canadian) received a Research Time Stipend in Year 2 (if you know) ___ Don’t know _?____

How much funding, in Year 2, was awarded to your sub-theme to support student research
$_____$15,000______________ Don’t know _____

6. Item 4 above provides a brief description of the accomplishments of the sub-theme with respect to the milestones. Please describe any additional particular responsibilities, if any, that you would like to comment on high-lighting activities of your sub-theme or its member in Year 2 (e.g., supervision of student work; writing ethics review, liaising between AIRS and students) to assist reaching the Goals of AIRS and/or the goals of the sub-theme. If you feel this information is suitably provided in other sections of this report, please feel free to move on.

7. Please describe the results your sub-theme has obtained or the nature of the information you sub-theme members were working toward obtaining in Year 2. Please be careful to distinguish between actual and hypothesized results. If the information is provided elsewhere in this document, please refer simply to that section or sections.

8. Please describe scholarly outcomes of your sub-theme’s work expected by next year or later. (if elsewhere in this form, please indicate where, and move on).

9. Please describe expected or potential contributions of audiovideo or text materials that your sub-theme will be providing for research or pedagogical use in the AIRS digital library, or indicate the use members of your sub-theme expect to make of the digital library, if that is clear now.

10. Please provide the names of any students supervised by members of your subtheme, indicating if they were supported by AIRS. Please distinguish between student research support and student travel support, as there were 2 different programs. Expand number of rows if needed (ignore extra ones, or remove).
Please identify an undergrad student as U, master’s student as M, PhD as PhD, Post-doc as PDF, Research Associate as RA, Other as Oth. If all of the information is not available to you, please insert * or ? to indicate missing information.

Student name, supervisor and brief project description

Jean Emmerson, NICOL
- Benefits of a school-delivered singing program for teen mothers and their infants

Marieke Blom, NICOL
- Enhancing Mother-Child Attachment with Singing

Sally Busch, GICK
- Caregivers’ feedback on singing and health and well-being associations in residents of a long-term nursing home who have dementia.
- Well-being in community choirs.

Carina Daugherty, GICK
- ?

Marya Stonehouse, NICOL
- Grounded theory of choir singing as a health promoting activity

Katie McCaw, NICOL
- Grounded theory of choir singing as a health promoting activity

?, COHEN & KLEINERMAN
- Later life singing lessons

11. Please provide complete bibliographic information for any of the following types of dissemination arising from your work related to AIRS from April 1, 2010 to March 31, 2011—we are particularly interested in work that would not have been carried out without the AIRS project. Some categories below are more relevant to certain themes than others.

a) Review articles published or in progress


b) Workshops presented, or accepted for presentation

c) Recordings (CD, DVD)

d) Oral Presentations or Poster Presentations (please distinguish)


12 Theses: Please indicate whether during Year 2, there were any student theses under supervision by members of your sub-theme in progress or completed at the Undergraduate, Master’s or Doctoral level with a topic directed toward addressing one or more of the goals of AIRS.

Degree Level Undergraduate
Name: Carina Daugherty
Department: Psychology
University: Carleton
Supervisor: Gick
Degree Level  PhD
Name:  Jean Emmerson
Department: Educational Psychology & Special Education
University: University of Saskatchewan
Supervisor: Nicol

Degree Level  MEd
Name:  Marieke Blom
Department: Educational Psychology & Special Education
University: University of Saskatchewan
Supervisor: Nicol

14 – summary of selected deliverables (please see what is listed for your sub-theme in the Milestone document)

**Deliverables:** Showing Estimated total for 3.5 years and number produced in Year 2

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<th>Presentations</th>
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<th>Proc Papers</th>
<th>Articles published</th>
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AIRS Students and Young Professionals Report
submitted by Andrea Emberly

Year Two:

For the students and young professionals (SYP), this has been a year of getting research projects off the ground, writing up research results and moving forward with AIRS related goals. We have welcomed many new students and young professionals to the group and are looking for new ways to keep everyone in contact as we grow. We have started a facebook page, an email listserv and are hoping to get a blog off the ground in the coming year. We also hope to get an SYP panel of representatives from each of the themes and subthemes running to facilitate better communication between all the SYP members of AIRS. So if you have someone you think might be great for this panel please be in touch!

At the AIRS meeting in Seattle, the SYP had an AIRS sponsored pizza party where we had great numbers of people turn out. As always, we were impressed by the diversity of research topics and interests and discussed at great length the possibilities of collaborations and cross-theme connections. We also spoke about possible outputs and results including AIRS SYP panels at conferences, publications and newsletters. We set up a newsletter team (Christopher Roberts, Rayna Friendly, Sandra Cornaz) and have come up with our first newsletter to be shared at the AIRS meeting in Newfoundland.

Some of the research reported from SYP this year includes:

- Health and wellbeing between infants and mothers
- Intonation and choirs
- Research on singing in Ethiopia
- How to measure wellbeing in relation to singing
- Cross cultural research in singing and community
- Singing resources on the internet
- The benefits of singing when learning a foreign language
- Wellbeing effects of singing
- Milestones in singing production and perceptions
- Singing after a stroke
- Vocal production and perception
- Singing and music in Tanzania

As we move forward as a group of students and young professionals what is becoming apparent in our research is the diverse ways in which singing contributes to wellbeing – from physical to psychological, from cultural to sociological. The AIRS SYP group is excited to meet this year in Newfoundland and a meeting for the group is scheduled for July 12th. As Andrea will be unable to attend, she sends her regrets, but Rayna Friendly will be there to represent the SYP and chair the meeting. We look forward to creating more synergies at this year's meeting!
The SYP represented at the meeting in Seattle included:

Alicia Altass
Rita Bento
Uptola Borah
Marieve Corbeil
Sandra Cornaz
Lisa Chan
Andrea Emberly
Jean Emmerson
Amy Fancourt
Jennifer Farrell
Rayna Friendly
Sylvain Lamesch
Jonathan Lane
Yohana Leveque
Dawn Merrett
Judy Plantinga
Marju Raju
Christopher Roberts
Hans Utter

Teleconferences were held during the year involving several others.