

# Message di Voce

## ADVANCING INTERDISCIPLINARY RESEARCH IN SINGING-SSHRC major collaborative research initiative

### FROM THE DIRECTOR – FALL 2012

*Messa di voce* (which means in Italian “placing the voice”) refers to a centuries old classical vocal exercise entailing a controlled increase and decrease in loudness on one note, with the aim of producing a most pleasing and expressive sound. (See [Collyer & Davis, 2007](#); [Titz et al., 1999](#) for related research). Our new newsletter entitled *Message di Voce* highlights the controlled and sustained AIRS research on the singing voice which will continue to create a beautiful outcome over the next 3-plus years. The timing of this particular newsletter is close to the midpoint in the 7-year AIRS SSHRC Major Collaborative Research Initiative, while we are still caught up in the momentum of the 4<sup>th</sup> Annual Meeting but now looking ahead to the 5<sup>th</sup>. Below, I have provided some recent highlights: the outcome of the Midterm Review Committee Report, a recap of the Annual meeting, and future directions. The Project manager has also provided information on deadlines, and other practical matters.



### 1. Midterm Review, Aug 22nd – 23rd

The Report the Midterm Review Committee was recently received. Written by Professor Friedemann Sallis, Chair University of Calgary, Dr. Elizabeth Margulis, University of Arkansas and Dr. Rita Aiello, New York University, the report “applauded the team for its achievements” and spoke highly of the “excellent opportunities and a rich research environment” provided to the students, and emphasized the continuing value of the milestone document in order to meet the continuing research objectives. The Committee also emphasized the need for the continued development of the integration and cross-fertilization of themes, and this certainly resonates with a major thrust of the Annual Meeting and other recent initiatives. A number of other specific recommendations were made, and I have been asked by SSHRC to respond to the report by mid November in terms of how AIRS will meet the recommendations over the next years of the grant.

### 2. AIRS 4<sup>th</sup> Annual Meeting

AIRS directs considerable financial resources to the AIRS Annual Meetings. The meetings provide the one time each year for a good cross-section of the AIRS collaborators—from students to senior researchers—to come together, experience the entire scope and progress of the project, and share ideas. To this end, much effort goes into creating a schedule that allows for the greatest opportunity for sharing ideas, communicating accomplishments, consolidating teams, and opening the doors for future synergies among teams and individual collaborators. The schedule this year resulted in 3 to 4 very intensive and full days providing momentum for the year ahead. It takes a lot of planning and work at the home site, and co-operation and efforts of the team around the globe to pull this off, and the following report suggests we did it!

Over 80 researchers of singing attended the AIRS 4<sup>th</sup> Annual Meeting, held at the University of Prince Edward Island. Approximately half of the attendees were students or young professionals. The large number of students at the Annual Meeting is a success of AIRS, as one of the goals of AIRS is to provide students with opportunities to participate in scholarly meetings and interact with peers, and junior and senior scholars.

Among these opportunities is also the chance to share cultural perspectives. The AIRS 4<sup>th</sup> Annual Meeting achieved this by bringing together researchers from Australia, Brazil, China, France, Kenya, Iceland, Italy, Japan, Portugal, Switzerland, United Kingdom, United States, in addition to Canada, and included persons of Greek, Indian, and Maltese origin as well.

### This ISSUE

1. [Midterm Review Report](#)
2. [AIRS 4<sup>th</sup> Annual Meeting](#)
3. [Midterm Review](#)
4. [AIRS Dissemination at Other Meetings](#)
5. [Meeting AIRS Milestones](#)
6. [AIRS 5th Annual Meeting and Future Meetings of Interest](#)
7. [Project Manager's Messages](#)
8. [Final Remarks from the Director](#)



## Day 1. Plenary overview, posters, and opening ceremonies

The 3-day main program began with warm greetings from the UPEI's Associate Dean James Moran (Dean Desserud had another commitment), followed by words of inspiration from AIRS Advisory Board members, Dr. Hilary Apfelstadt (University of Toronto), Dr. Philip Smith (UPEI), and Dr. Kate Stevens (University of Western Sydney, Australia). Ben Bolden (Queen's), Hilary Apfelstadt and Darryl Edwards (Toronto) led everyone in singing *Dona Nobis Pacem* as a three-part round. As AIRS Director, I briefly reviewed the AIRS progress over three and a half years, thanking all the collaborators for their contributions in meeting the milestones and leading to an outstanding Midterm Report, of which every attendee was given a copy along with the Conference Program.

With Theme Leaders (Frank Russo - Theme 1 Development, Patricia Campbell - Theme 2 Education, and Godfrey Baldacchino standing in for Mary Gick Theme 3 Wellbeing) each presiding over their three sub-themes, the more detailed overview of the entire AIRS project began with the sub-theme leaders (Christine Tsang 1.1, Frank Russo 1.2, Annabel Cohen 1.3, Patricia Campbell 2.1, Darryl Edwards 2.2, Jennifer Sullivan 2.3, Godfrey Baldacchino & Lily Chen-Hafteck 3.1, Rachel Heydon (by videoconference) 3.2, and Jean Emmerson (for Jennifer Nicol) 3.3, running through progress of their subtheme. In addition, Nyssim Lefford represented the Digital Library Team 4.0; Jenny Sullivan represented the Statistics, Ethics, and Intellectual Property Committee; Arla Good represented the Student and Early Career Professional Committee, and Corrine Hendricken-Eldershaw spoke for the AIRS Partners. Before the morning ended, opportunity was provided for members of each Theme to meet to discuss milestones for the next 3.5 years of AIRS.

The Technical Program in the afternoon showcased posters representing research in each of the 9 AIRS sub-themes conducted over the last year. The public was invited to the latter part of this poster session. The official opening of AIRS took place at 4:30 with greetings offered by Christian LaCroix, UPEI Vice President Academic who also gave high praise for the scope and strength of the AIRS Midterm Report. After a rousing rendition of *O Canada* led by Darryl Edwards, AIRS members were each introduced, sub-theme by sub-theme. The geographic



representation (12 countries, 8 provinces of Canada), disciplinary spread, and range of expertise were impressive. Members of the UPEI AIRS Multicultural Choir and Song Circle sang songs from Germany and Japan and ended with the *AIRS Round*, in which everyone was invited to join in. Student Denise Beaton described her honours research project involving AIRS partner Young at Heart Musical Theatre Company, and its CEO Catherine O'Brien entertained with a classic maritime song. Following a buffet dinner, a concert organized by Sung-Ha Shin-Bouey featured AIRS attendees as well as several of Sung-Ha's students and associates, in a program ranging from folk to musical theatre to Italian opera and music from Brazil and North India. A reception provided an opportunity to congratulate the artists, eat, drink and be merry, and have further dialogue, ending a full first day.



## Day 2. Technical program paper presentations

The following day entailed research presentations organized by sub-theme within each theme, and provided time for open discussion by theme. The format further encouraged shared understanding of all the advances being made through AIRS and the initiatives being undertaking. Developing a common knowledge base and getting to know all the players fosters opportunity for synergy. Such synergy was much in evidence at lively coffee breaks and discussion periods within and outside the meeting. The morning also included a session on data sharing organized by Nyssim Lefford and chaired by Mike Forrester with panelists Helga Gudmundsdottir, June Countryman, and Donald Moses. Lunch featured two key-note presentations by Elisabetta Corvo from Italy who spoke about her study of the benefit of choral singing for senior citizens (Sing for your Life program) and Félix Neto (Portugal) who described the role of teaching songs of a minority culture in improving school children's attitudes towards the minority culture, a replication of his earlier study with M. Sousa and E. Mullet ("Can music change ethnic attitudes among children?", published in *Psychology of Music*, 33, 304-316). This recent study showed that the beneficial effect was sustained beyond the immediate time of testing.

The afternoon continued with presentations from Themes 2 and 3, with a break midway to discuss the AIRS Book Series project. What is envisioned is a 3-Volume series, one volume for each of the 3 AIRS Research themes (Development of Singing, Singing and Education, and Singing and Well-being) with contributions from every AIRS researcher, either as single author or co-author, describing research conducted under the AIRS project. At this meeting, Mayumi Adachi's proposal of the development of another book or series to address a more general public audience was also met with enthusiasm.

Dinner at nearby restaurant offered AIRS an authentic Lebanese meal and a large and flexible space for the evening. After the main course, a program followed with presenters from France, and Brazil, engaging the audience in song and dance as they conveyed information about teaching techniques for 2nd language learning or learning of songs of their culture. AIRS was also treated to Utpola Borah's live on-line teaching of Indian vocal music by electronic communication to a 9-year old student in the United States.

## Day 3. Workshops, on the town, master class and finale

The next morning of workshops, organized by Bing-Yi Pan and me, began at 8 am with a live demonstration and opportunity to carry out the AIRS test battery together,

followed by a discussion of how to improve each component. The discussion led to the agreement on the need to have a separate test battery for young children age 5 to 8 years and a group of six took opportunities during breaks, lunch, and end of the day to develop a plan. (Immediately upon returning home, the group met by videoconference and has now submitted a detailed description of this protocol.) Coralie Vincent presented a workshop on what not to do when audio recording. In a pitch analysis workshop Stefanie Stadler Elmer, Christine Tsang, Steven Livingstone, and Bing-Yi Pan presented their different approaches to the analysis of pitch, leaving the suggestion that next year each approach should be applied to the *same* example of singing with the results to be compared. A final workshop on the Digital Library provided an opportunity for the AIRS members to see further how the DL worked and to raise further questions, with George Tzanetakis, Theresa Leonard, Donald Moses, Jonathan Lane and Nyssim Lefford fielding questions.

The conference moved downtown to the outdoor cafés on Victoria Row across from a small stage and sound system provided by Music PEI. AIRS members offered an informal vocal variety concert including a heart-wrenching version of *Brother John (Frère Jacques)*. Following lunch, the students from the Quad-Country Songbook project had the opportunity to present findings from their respective four countries where the same protocol had been completed under very different circumstances and cultures - an extraordinary accomplishment in itself. World class professionals, tenor Darryl Edwards and pianist Rena Sharon performed several songs reminding us of the heights and depths of vocal and musical excellence. UPEI's own diva extraordinaire Sung-Ha Shin-Bouey assisted Darryl and Rena in a most entertaining dramatic performance of Richard Strauss' *Habe Dank*, helping to support the conviction of Rena Sharon (founder of the Vancouver International Song Institute) that Art Song must live, but can only do so if performance practice acknowledges its vital dramatic nature that can be conveyed through movement and emotional expression. Darryl Edwards then conducted a master class with brave volunteers from the AIRS community: Nancy Gleason, Thérèse Antonini, and Kai Davino-Collins, each representing a different kind of repertoire (opera, barbershop, and musical theatre respectively). The effectiveness of brilliant pedagogy and outstanding students was inspirational, moving several members in the audience to consider beginning voice lessons (and have since acted on it). Sorry, everyone, as you can imagine, Darryl's schedule is already full.

Speaking on behalf of all three advisory board members, Philip Smith and Kate Stevens provided motivating words of encouragement, based on their own





intensive days evaluating AIRS. The day had not yet ended. Godfrey Baldacchino had composed a tribute song to the Director and all were invited to join in the chorus, and a second original song on the same theme was composed by Alda Oliveira who accompanied the AIRS researchers on the piano. The warm display of feeling of the AIRS team was greatly appreciated and a little overwhelming. I took the opportunity then to acknowledge all the work and effort that made the AIRS Annual meeting a success (see later acknowledgement section).

The students went off for some treats and dinner etc. at the Pourhouse, and the more senior folk took advantage of the first unscheduled time since their arrival. Making this a true Island event, the party reconvened for desert, drinks and more conversation in my living room and kitchen. Rumour has it that this was not however the last stop for the students.

## PRECONVENTION DAY

**Quad-Cultural Songbook.** The day before the conference began, the Quad-Cultural Songbook project held a full-day workshop for the researchers from the four countries (Brazil, Canada, China, and Kenya) and the US team leading the project under the direction of Lily Chen-Hafteck. The meeting was open to all AIRS researchers and attracted attendees with particular interests in learning to sing naturally, cross-cultural aspects of singing, and the role of singing on improving cultural understanding. This was the second such workshop, providing the foundation for co-ordination collaboration across the five countries throughout the year. Whereas last year, the focus was getting the project off the ground in the four countries, the focus of this year was the analysis of the data collected and methodological improvement.

**Policy and Planning Committee.** The members of the Policy and Planning Committee met in the afternoon so as to integrate their presentations into a seamless single presentation for two occasions the next day - a longer version for the AIRS morning plenary, and a shorter version for the SSHRC annual review via a videoconference (see below). Following a barbeque, the Committee held its meeting from 6:30 until 10 pm, covering a full agenda focusing on the midterm review, the annual meeting and the next milestone document.

**Student pre-conference events.** A student pizza dinner took place to provide the students who had arrived an opportunity to meet as early as possible in the meeting and to enable them to develop their organizational structure which could assist AIRS in best serving them. Arla |Good is acknowledged for her leadership here.

## Program

The printed program included the abstracts and biographies of all presentations and posters, music for several songs from the AIRS song book, and the Midterm Report covering all of AIRS activities for the first 3+ years. Photos (soon to be available on the web-site and a few of which are included in the newsletter), are a reminder of the extensive program and the positive spirit of co-operation and goodwill resounding during the meeting.

## ACKNOWLEDGEMENTS

**Specific gratitude in connection with the AIRS 4<sup>th</sup> Annual Meeting is expressed to:** (underlined names were present at the meeting)

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

**AIRS Theme leaders** – Frank Russo, Patricia Campbell, Mary Gick (represented by Godfrey Baldacchino) who inspired the effectiveness of their respective Theme and 3 sub-theme teams at the meeting

**AIRS Sub-theme leaders and co-leaders:** Christine Tsang, Laurel Trainor, Sandra Trehub, Darryl Edward, Andrea Rose, Jennifer Sullivan, Godfrey Baldacchino, Lily Chen-Hafteck, Rachel Heydon, Jennifer Nicol for their progress on meeting the goals of their sub-themes

**AIRS Committee leaders:** Ichiro Fujinaga and George Tzanetakis (Digital library), Mary Gick and Jenny Sullivan (Intellectual Property, Ethics, Statistics), Arla Good (Student), Mayumi Adachi (Global group)

**AIRS Project Manager** - Therese Antonini

**AIRS Administrative Assistant** - Ross Dwyer

**AIRS IT Technical Co-coordinator** – Jonathan Lane

**AIRS Student Assistant and photographer** – Erica Ross (Lead, and program compilation), Marley MacInnis, Gillian MacDonald

**AIRS Student videographer** - Mike Speelman

**Time Keepers:** Denise Beaton, Kelly Gillis; special thanks to Sandra Trehub

**AIRS concert co-coordinator** - Sung-Ha Shin Bouey

**Bandstand and sound system** -Victoria Rowe– Music PEI (Rob Oakie)

**Confederation Centre of the Arts**

**Note:** Several AIRS collaborators, such as Lauren Stewart, Petra Hauf, Nathalie Henrich, Henrietta Lempert, and Jennifer Nicol, were unable to attend and were represented by their students. Master's Student Emma Borthwick-Hunter from the UK also was unable to attend.

The following is a list of all AIRS team members and students attending the conference:



“O” oral presentation first author  
 “o” oral presentation co-author  
 “P” poster first author  
 “p” poster co-author  
 “S” concert soloist  
 “s” street performer  
 “W” workshop facilitation

### **Faculty members attending**

Mayumi Adachi, Psychology, University of Hokkaido, Japan (O,s)  
 Hilary Apfelstadt [Advisory Board Member] Faculty of Music, University of Toronto  
 Godfrey Baldacchino, Island Studies, University of Prince Edward Island, CA (P)  
 Patricia Campbell, Music Education, University of Washington, Seattle, USA (O)  
 Lily Chen-Hafteck, Music, Kean University, USA (O,p)  
 Amy Clements-Cortes, Music, University of Windsor, CA (O)  
 Annabel Cohen, AIRS Director, Psychology, University of Prince Edward Island, CA (o,p,W)  
 June Countryman, Music, University of Prince Edward Island, CA (O)  
 Alda de Jesus Oliveira, Federal University of Bahia, Brazil (P)  
 Darryl Edwards, Music, University of Toronto, CA  
 Mike Forrester, Psychology, University of Kent, UK (W)  
 Helga Guðmundsdóttir, Education, Iceland University of Education, Iceland (O,o,W)  
 Beatriz Ilari, Music, Federal University of Paraná, Brazil (P,p,W)  
 Theresa Leonard, Audio Recording, Banff Centre for the Arts, Alberta, CA (W)  
 Donald Moses, Robertson Library, University of Prince Edward Island (W)  
 Felix Neto, Psychology and Education Science, University of Porto, Portugal (O)  
 Frank Russo, AIRS Theme 1 Leader, Psychology, Ryerson University, Toronto, CA (O,o,p)  
 Rena Sharon, Director VISI, Music, University of British Columbia, CA (O)  
 Philip Smith [AIRS Advisory Board], Chair Dept. of Psychology, University of Prince Edward Island  
 Stefanie Stadler Elmer, Developmental Psychology, University of Zurich, Switzerland (O,s,W)  
 Catherine Stevens, [AIRS Advisory Board Member] Associate Director MARCS, University of Western Sydney, Australia  
 Jennifer Sullivan, Psychology, St. Francis Xavier University, Nova Scotia, CA (W)  
 Sandra Trehub, Psychology, University of Toronto and BRAMS, Montreal, CA (p)  
 Christine Tsang, Psychology, Huron University College, CA (o,W)

George Tzanetakis, Computer Science, University of Victoria, British Columbia, CA (W)  
 Coralie Vincent, Laboratoire de Phonétique et Phonologie, Centre national de la recherche scientifique, France (O,W)  
 Jiaxiang Xie, Chino Music Research Institute, China Conservatory, China (O)

### **Students & Early Career Researchers attending**

\*indicates travel grants applied for and awarded from AIRS for travel to the AIRS Annual Meeting.  
 \*\* indicates travel award through the 3.1 Quadcultural Songbook project

\*\*Zuraida Abud Bastio, PhD, Federal University of Bahia, Brazil (o)  
 \*\*Elizabeth Andang'o, PhD, Kenyatta University, Kenya (o)  
 \*Robert Anderson, PhD, Kean University, USA  
 Denise Beaton, Undergrad, Psychology, University of Prince Edward Island, CA (p)  
 \*Utpola Borah, Ph. D., independent researcher, music of North India, Columbus, Ohio (O)  
 \*Lisa Chan, PhD, Psychology, Ryerson University, Toronto, CA (O)  
 Lusi Chen, Undergrad, Business, University of Prince Edward Island (p,s)  
 \*Sandra Cornaz, PhD, Department of Language Sciences, University of Grenoble, France (O)  
 Elisabetta Corvo, PhD, Philosophy, Canterbury Christ Church University, UK (O)  
 \*Lisa Crawford, DMA, Music Education, University of Southern California (P)  
 \*Carina Daugherty, Masters, Psychology, Carleton University, CA (P)  
 Blair Ellis, Undergrad, Mount Allison University, CA (P)  
 \*Jean Emmerson, PhD, Educational Psychology and Special Education, University of Saskatchewan, CA (O)  
 \*Amy Fancourt, Undergrad, Psychology, Univ. London, Goldsmiths, UK (O)  
 \*Nancy Gleason, PhD, Kean University, USA (S)  
 \*Arla Good, Ph D, Ryerson University, CA (o)  
 Kelly Gillis, Undergrad, Psychology, University of Prince Edward Island, CA (o)  
 \*Daniela Gramani, Masters, Music, Federal University of Paraiba, Brazil (O,S)  
 \*Maren Haynes, Masters, Ethnomusicology, University of Washington, Seattle, USA (O)  
 \*Jennifer Hutchison, PhD, Music Education, Western University, CA (O)  
 Jonathan Lane, AIRS Technical Coordinator, University of Prince Edward Island, CA (W)  
 Nyssim Lefford, Post-doctoral Fellow, University of Prince Edward Island, CA (o,p,W)



\*Steven Livingstone, Post-doctoral Fellow, Ryerson University, CA (O,o,W)  
 Gillian MacDonald, Undergrad, Psychology, University of Prince Edward Island, CA  
 \*Tiana Malone, Masters, Music in Vocal Performance, Concordia University, CA (P,S,s)  
 \*Katie McCaw, Masters, School and Counseling Psychology, University of Saskatchewan, CA (p)  
 Marley McInnis, Undergrad, Psychology, University of Prince Edward Island, CA  
 \*Sara Murphy, Undergrad, Psychology, St. Francis Xavier University, CA (P)  
 Bin-Yi Pan, Post-doctoral Fellow, University of Prince Edward Island, CA (O,p,S,s,W)  
 Sisi Pan, Undergrad, Psychology, University of Prince Edward Island, CA (P)  
 \*Charlene Parker, Undergrad, Psychology, St. Francis Xavier University, CA (p)  
 \*Christopher Roberts, PhD, Music, University of Washington, Seattle, USA (O,S)  
 Erica Ross, Undergrad, Psychology, University of Prince Edward Island, CA  
 Michael Speelman, Undergrad, Psychology, University of Prince Edward Island, CA  
 \*Marya Stonehouse, Masters, School and Counseling Psychology, University of Saskatchewan, CA (P,p)  
 Natalie Sullivan, Undergrad, Music, University of Prince Edward Island, CA (o,S)  
 \*Merrill Tanner, PhD, Music in Voice Performance, University of Alberta, CA (O)  
 Kate Thompson, Undergrad, Music, University of Prince Edward Island, CA (o)  
 \*Hans Utter, PhD, Ethnomusicology, Ohio State University, USA (O)  
 \*\*Angelita Vander Broock Schultz, PhD, Music Education, Federal University of Bahia, Brazil (o,P)  
 \*\*Yue Xiao, China Conservatory of Music, China (o,S)  
 \*Jingle Yi, Undergrad, University of Toronto, CA (P – for Henrietta Lempert)

#### **Other Attendees**

Benjamin Bolden, Faculty of Education, Queen's University, CA (O)

Anna Baldacchino, Education, University of Prince Edward Island, CA  
 Ellen Bowman  
 Suzanne Davino  
 Kai Davino-Collins (vocal workshop participant)  
 Rachel Francine, Music Health Technologies (SingFit)  
 Jennifer Jestley, Post-doctorate (P)  
 Jamarly Oliviera

#### **Awards:**

There were many AIRS travel grants awarded as noted above. Congratulations to all students who applied and were successful. It is appreciated that some students received awards from other sources that enabled travel. Congratulations on receiving those awards. Student presentations and posters were all of high caliber and were exciting and informative, and every student presenter (and performer) deserves thanks, encouragement, and congratulations. AIRS Annual Meeting Poster Awards were made to one student poster from each of the three AIRS Research Themes. Congratulations on these awards go to (affiliations shown above):

#### **Theme 1:**

**Sara Murphy & Charlene Parker** (& Petra Hauf) St. Francis Xavier University, NS, Canada  
 Is this novel or familiar? Infant's looking response to infant-directed speaking and singing

#### **Theme 2:**

**Angelita Broock** (& Beatriz Ilari) Federal University of Bahia (UFBA) and CAPES and University of Southern California  
 Children's songs fieldwork project: Bahian children sing their favorite tunes

#### **Theme 3:**

**Carina Daugherty** (& Mary Gick) Psychology, Carleton University, Ottawa, Ontario  
 Asthma in a sample of Carleton University Students: A pilot study

See posters next pages




Theme 1: Sara Murphy & Charlene Parker (& Petra Hauf)



## Is This Novel or Familiar?

### Infant's Looking Responses to Infant-Directed Speaking and Singing

Sara Murphy, Charlene Parker, & Petra Hauf  
St. Francis Xavier University, Antigonish, NS, Canada



#### Introduction

By 6 months of age, infants become increasingly interested in their environment (Legenstein et al., 1987). At this time, they already demonstrate a preference for social stimuli with a positive valence, as well as a preference for human faces (Nakata & Trehub, 2004). Thus, it is important to understand how social partners should interact with infants so that these interests may be best attended. Research on vocal interaction with infants has accumulated the notion of an infant-directed (ID) register. ID-speaking is characterized by heightened pitch, distinct and exaggerated pitch contours, and slower tempo. Similarly, ID-singing is characterized by heightened pitch, slower tempo, and a regulated pulse (Nakata & Trehub, 2004). Research on infant-mother dyads found that infants were more attentive to ID-singing than to episodes of speaking (Shalata & Trehub, 2004). These findings suggest that ID-speaking may be particularly effective for recruiting attention and efficient learning, while ID-singing may facilitate emotional communion and arousal regulation.

To further investigate infants' responsiveness to these two vocal styles, the present study introduced eye-tracking technology as a standardized, non-invasive source during the presentation of audio-visual displays of an adult engaging in ID-singing and speaking of familiar or novel lyrics.

#### Method

**Participants**  
The participants included in this study were 24 typically developing infants (12 female) between 5;13 and 7;06 months of age (M = 6 months, 13 days).

**Procedure**  
Infants watched two short videos (40 sec. each) of an adult engaging in ID-singing and speaking. Infants received one of two conditions:  
 • Condition 1: Familiar lyrics  
 • Condition 2: Novel lyrics

During the videos, eye-tracking and video recording were used to capture infants' specific looking behaviour, which included looking time to the full screen as well as to the areas covering eyes and mouth.

#### Results



6- and 12-month-old infants looked longer at singing episodes than comparable episodes of infant-directed speaking in trials with familiar lyrics and in trials with novel lyrics.



For familiar lyrics 6- and 12-month-old infants looked longer at the mouth area compared to the eyes area in singing trials and speaking trials.

However, for novel lyrics 6- and 12-month-olds looked differentially at the mouth and eyes areas in singing trials and speaking trials.

#### Conclusions

- Overall, all infants looked longer at ID-singing episodes compared to ID-speaking episodes for both familiar and novel lyrics. This indicates more intense infant engagement in singing versus speaking.
- In singing and speaking trials with familiar lyrics, infants displayed a preference for the mouth region over the eye region, reflecting an increasing interest in language. However, 12-month-olds did not show this preference in speaking trials.
- In speaking trials with novel lyrics, 6-month-old infants scan the mouth region more than in singing trials with novel lyrics. However, the opposite was the case for 12-month-olds. This shift of attention between the mouth and the eye region may signal different need in additional emotional information when confronted with a novel lyrics and melodies.
- In general, current findings suggest that ID-singing may promote emotional engagement, while ID-speaking may facilitate information processing.
- Fast findings suggest attentional shifts, as 12 months old infants look less often to the mouth region when listening to native language, but this is not the case when listening to non-native language, as infants still need audio and visual cues to comprehend novel speech (Lewkowicz & Hansen-Tift, 2011).




#### References

Nakata, T., & Trehub, S. E. (2004). Infant's responsiveness to maternal speech and singing. *Infant Behaviour and Development*, 27, 465-484.  
 Legenstein, H., Fombonne, A., Mikul, D., & Feller, H. (1987). The development of infant's response to people and a doll: implications for research in communication. *Infant Behaviour and Development*, 10, 81-95.  
 Lewkowicz, D.J., Hansen-Tift, A.M. (2011). Infants display selective attention to the mouth of a talking face when learning speech. *PNAS*, 108(1), 1421-1426.

Theme 2: Angelita Broock (& Beatriz Ilari)

## Children's songs fieldwork project: Bahian children sing their favorite tunes

Angelita M. V. Broock  
angelbroock@gmail.com  
Federal University of Bahia (UFBA), and CAPES

Beatriz Ilari  
ilari@usc.edu  
University of Southern California (USC)

#### Background

Children sing in many contexts of their everyday lives. They learn songs and musical games as they interact with teachers, family members and friends, whether in moments of leisure or formal learning (Campbell, 2002). Songs play important roles in many aspects of their lives. But, to this date, little is known about the songs that children choose to sing well as their functions and meanings. Furthermore, how these songs shape early musical preferences remains unknown. This is especially true in the case of Brazil, where research concerning music and children is in its early stages.

#### Purpose

The purpose of this exploratory study was to describe and document children's favorite songs.

#### Method

**Sample**  
Six middle-class Brazilian children (3 boys and 3 girls), aged 4 to 6 years of age. Five of them participated in the Community Outreach Project "Musicalização Infantil" of the Federal University of Bahia, in Salvador, and did not know one another.

**Procedure**  
Children were invited to meet with the researcher as in a focus group, and talk about music and sing. The researchers asked three questions: "Do you like to sing?", "Could you choose your favorite song and sing it for us?" and "Where did you learn this song?" This meeting happened in two parts: in the first part they were invited to sing in a group. In the second part, they were invited to sing alone.

**Data analysis**  
1) Favorite tunes.  
2) Musical contents: singing ranges, melodic and tonal elements, use of expressive features, following Welch's (2005) model of vocal pitch-matching development (VPMD).

#### Results

1) All children said that liked to sing. They were a little shy, but everybody sang their favorite song. In total, 12 songs were collected (5 in group, and 7 alone). Two categories emerged:  
 - 11 "children's song" including: traditional folksongs, invented songs and one song by Xuxa (well-known pop singer for children in Brazil). Children stated that they learned these songs in elementary school.  
 - 1 "pop song": Skank (well-known pop group in Brazil). The child said that he learned this song through a DVD at home. He sang this song with a toy imitating a electric guitar.

#### Children's song

Who sings	Song
C3 and C4	Borboletinha (Folk song)
C3 and C4	Soco bate (Xuxa)
C3 and C4	Fui morar numa casinha (Folk song)
C3, C4 and C5	Fui morar numa casinha (Folk song)
C3, C4, C5 and C1	Marcha soldado (Folk song)
C1	Pendi meu and no mar (Folk song)
C2	Não atire o pau no gato - variation of "Atirei o pau no gato" (Folk song)
C3	Marcha soldado (Folk song)
C3	Borboletinha (Folk song)
C4	Atirei o pau no gato (Folk song)
C5	Bana muntipa - version made by the child with two different folk songs

We used the code [C + number] for each child.

#### Pop song

Who sings	Song
C6	Partido de futebol (Skank)

2) Children's singing was evaluated using a 4-point Likert scale, following Welch (2005). In this very small sample, the average rating was 3,2.

#### Discussion


These musical selections are a result of what children learn at home or at school. It was interesting that children in this age group chose to sing traditional songs over invented or pop ones. The fact that children were singing in groups and that the researcher was the music teacher of many, possibly influenced their song selection. Likewise, it is also possible that this repertoire represents the stereotypical view of music teaching in the early years. As Campbell (2002) suggested, it is generally accepted that teachers have a very similar repertoire, despite their own particularities. In Brazil, this also seems to happen, and this "common repertoire" usually contains folksongs.

#### Directions for future research

Considering that this is an exploratory study, the next steps include collecting data with a large group. We will examine the effects of age and formal music education in children's singing. We also intend to investigate how family and school influences children's singing repertoires, and how these change as a function of development and growth.



Theme 3: Carina Daugherty (& Mary Gick)



## Asthma in a Sample of Carleton University Students: A Pilot Study

Carina Daugherty, B.A. and Mary Gick, Ph.D. Department of Psychology

### Abstract

Asthma is caused by interference in airways due to muscle spasms, secretion of mucus, and inflamed tissues contributing to discomfort when breathing. Asthma is irreversible but can be managed, commonly with bronchodilators. Research on benefits of singing in asthma (e.g., due to controlled breathing) is inconclusive and lacking in adults. The present pilot study examined frequency and perceptions of singing in students with asthma. Participants (n = 93) from Carleton University, with a self-reported diagnosis with asthma, completed an online questionnaire consisting of self-reported measures of well-being, and asthma history, severity, and control. Participants were also asked about activities (including singing) engaged in, or avoided due to asthma, and perceptions of these activities for asthma control. 65% of participants reported that they sing, and most participated in meditation/yoga and exercise/sports. Most (84.7%) participants reported that exercise or sports helped control their asthma, while only 34% of participants reported that singing helps control their asthma. Approximately 50% of participants reported at least sometimes avoiding exercise or sports due to asthma, while 30% of participants reported avoiding singing due to asthma. Although singing and exercise/sports participation was not associated with asthma severity, participants reporting avoiding singing or exercise/sports due to asthma had significantly poorer asthma control (both  $p < .01$ ). Students avoiding exercise/sports scored lower on vitality ( $p = .018$ ); participants avoiding singing also tended to have lower vitality ( $p = .110$ ). Taken together, students with asthma sing less than they exercise and perceive it to be less beneficial for their asthma. Future research comparing students with asthma to those with other (or no) illnesses may determine whether the pattern of singing and exercise frequency and perceptions is common to all students. Singing interventions may help uncover the relationship between singing avoidance, and asthma control and vitality.

### Introduction

- Participants in the studies of singing and health have reported improved lung function and better breathing as a result of singing.
- Improvement in breath control as a result from singing has been reported by patients with COPD.
- Controlled breathing, which occurs while singing, may assist in improving asthma symptoms similar to benefits observed for singing in COPD.
- There has been inconclusive research on the potential benefits of singing on children with asthma and research has not yet looked at benefits of singing for adults with asthma.

### Participants

- 93 Carleton University students reporting diagnosis of asthma (mild n=62, moderate n=38, and severe n=3).
- Students aged 18-25 ( $M = 19.40$ ,  $SD = 1.53$ ).
- 25 males and 68 females.
- 16 participants had viral induced asthma (asthma symptoms when sick).

### Procedure and Materials

- Recruitment from Carleton University's online Sona system
- Link to Survey Monkey to complete online questionnaire
- Demographic information, information about asthma diagnoses and severity, and other medical conditions
- Original questionnaire: activities engaged in, or avoided because of asthma; singing was included among other activities (exercise/sports, meditation/yoga, playing a wind instrument, climbing stairs, and doing chores)
- Satisfaction With Life Scale (SWLS) (Diener, Emmons, Larsen, & Griffin, 1985) and Vitality Scale (VS) (Ryan & Frederick, 1997)
- Asthma Control Questionnaire (ACQ) provided information about participants' asthma symptoms within the previous seven days (Juniper, 1999). Higher scores represent worse asthma control

### Results

- McNemar's test was used to compare proportions, and t-tests were used to compare means
- Most exercise or play sports, and most reported meditation or yoga as being helpful for their asthma, followed closely by exercise or sports (see Table 1)
- Those avoiding singing and exercise or sports because of their asthma had significantly lower asthma control than those not avoiding these activities (see Table 2)
- 61.1% of participants who avoid singing compared to 38.6% of participants avoiding exercise or sports have moderate to severe asthma
- More participants avoiding singing because of asthma are also avoiding exercise and sports, or climbing stairs; however fewer participants avoiding exercise, sports, or climbing stairs avoid singing (both  $p < .001$ )
- Those who reported that meditation or yoga helped control asthma symptoms, also reported that singing helped control asthma symptoms ( $p < .001$ )
- Participants who had been told that meditation or yoga are good for asthma were also told that singing was good for their asthma ( $p < .001$ ).

### Discussion

- Students with asthma may sing less than they exercise and may perceive it to be less beneficial for controlling their asthma
- Results in this study suggest that singing is a less strenuous activity for those with asthma than exercise or sports
- There may be a general breathing component that exists in singing and meditation/yoga which students perceive as helpful for their asthma
- Those who believe that the breathing involved in meditation and yoga is good for asthma, may also be more likely to recommend singing to assist with asthma symptoms
- Limitations include: the high number of students who report that they exercise or play sports compared to the number of students reporting that they sing, the use of self-report data

### Future Research

- Comparing students with asthma to those with other (or no) illnesses may assist in determining whether the pattern of singing and exercise frequency and perceptions is common to all students.
- Comparison of students' spirometry rates after engaging in activities such as singing, exercise/sports and meditation/yoga to determine if students' perceptions of which activities are good for their asthma match the objective measurements.
- It may be useful to examine the differences between participants, with asthma, who participate in singing to those participating in meditation/yoga. This would assist in determining if it is the breathing component of both activities that would be helpful for asthma, or if singing may provide participants with more enjoyment, which may provide further benefits.
- Singing interventions may help uncover the relationship between singing avoidance, and asthma control, as well as, vitality and well-being in university students.

### Summary

Students tend to exercise or play sports more than they sing and may perceive exercise/sports and meditation/yoga as more beneficial for their asthma.

### References

Bushnell, A.L., Gersh, F., Vito, M.L., Davis, W.E., & A. M. (2009). Effects of singing classes on pulmonary function and quality of life in COPD patients. *Journal of COPD*, 6, 1-6.

Chen, M. (2011). Effects of singing on lung function and health in children with asthma. *Psychosomatic Medicine*, 73, 116-127.

Levi, V.M., Chen, F., Hsu, V., Poth, J.L., Poth, A., & Poth, J.L. (2010). Singing breathing as a therapy for chronic obstructive pulmonary disease and asthma. *Journal of Music Therapy*, 52, 20-27.

Juniper, E. (1999). A comparison of the effects of music and singing on respiratory function in children with asthma. *Music Therapy Perspectives*, 20, 30-37.

## AIRS evening concert

The following AIRS members performed in the concert

YUE XIAO, soprano,  
A Cup of Good Wine (Traditional Chinese)<sup>1</sup>

UTPOLA BORAH, vocalist; HANS UTTER, tabla  
Kajri (Traditional Indian Bihu song)

CHRISTOPHER ROBERTS, vocalist & dulcimer  
Kitty Alone (Appalachian)

BING YI PAN, tenor;  
The Last Rose of the Summer (Traditional Irish)<sup>2</sup>

TIANA MALONE, mezzo-soprano;  
Waitin' George -both by William Bolcom<sup>3</sup>

NANCY GLEASON, soprano  
Die Nacht Richard Strauss  
Fair Robin I Love (*Tartuffe*) Kirke Mechem<sup>3</sup>

DANIELLA GRAMANI, vocal & percussion  
Em nome de Deus Traditional Brazilian  
Nagô Hirigô Areia Equiô

NATALIE SULLIVAN, soprano<sup>1</sup>  
Stars and the Moon Jason Robert Brown

STUDIO of SUNG HA SHIN-BOUEY & STEPHEN  
BOUEY Every time I feel the Spirit  
Spiritual/arranged Shin-Bouey

<sup>1</sup>JEREMY GALLANT, pianist  
<sup>2</sup>SUNG HA SHIN-BOUEY, pianist  
<sup>3</sup>FRANCES MCBURNIE, pianist





## Photos AIR 4th Annual General Meeting - Charlottetown, PEI



### 3. Midterm Review, Aug 22nd – 23rd

The AIRS 4<sup>th</sup> Annual Meeting was held in conjunction with the videoconferenced two-day midterm review by a 5-member team representing the Social Sciences and Humanities Research Council (SSHRC), the primary funder of AIRS. From the start of the AIRS project, the midterm review has been a focus. Performance on the midterm review would determine the continuation of the project into its final 3.5 years. In all prior years of the MCRI (Major Collaborative Research Initiative) program, the review entailed a visit by the Review Committee to the project site. This year, SSHRC implemented a new policy such that reviews would now take place by videoconference. Given the presence of our International team in one place during the annual meeting, holding the midterm review videoconference at the time of the Annual Meeting was the only option; we would otherwise have faced the daunting task of assembling key spokespersons from widely differing time zones in addition to addressing the multiple time zones of the members of the review committee. In addition, in the summer faculty were free of teaching and many other university commitments.

In all, the SSHRC Review Committee, during the 2-day period (August 22-23) the SSHRC Review Committee spoke to over 35 different persons from AIRS. The following meetings with the SSHRC Review Committee took place:

#### Day 1.

- Director and Steering Committee (4 AIRS representatives)
- Policy and Planning Committee (12 AIRS representatives)
- UPEI Administration (4 AIRS representatives)

#### Day 2

- Advisory Board (3 AIRS representatives)
- Partners (6 AIRS representatives)
  - Alzheimer's Association of PEI
  - Culture PEI
  - Music PEI
  - Veteran's Affairs Canada
  - Young at Heart Musical Theatre
- AIRS Project Manager (moderator)
- Students (10 AIRS representatives)
- Director

### 4. AIRS Dissemination at Other Meetings

**American Psychological Association**, Orlando, Florida, Aug. 1-4:

Annabel Cohen: Advancing Interdisciplinary Research in Singing (AIRS): The role of psychology in a major collaborative research initiative in the arts – Mid-term update

**Arts Education Colloquium**, Melbourne, Australia, April:

Susan O'Neill: Creating learning opportunities in an intergenerational arts program.

**Canadian Society for Brain, Behaviour, & Cognitive Science**. Kingston Ontario, June 7-9

Symposium organized by Annabel Cohen and Frank Russo: New test instruments to study singing: Perception, production, and emotion.

Henrietta Lempert, Assunta Ferrante, Emily Moorehouse and Natalie Kwok: The effect of singing vs. speaking on learning a novel language.

Steven Livingstone, Kaitlyn Peck and Frank Russo: Database of emotional speech and song.

Bing-Yi Pan, D Liu, and Annabel Cohen: The AIRS On-line Test Battery of Singing Skills.

**Canadian Psychological Association**, Halifax, NS ,July 14-16:

Symposium organized by Jennifer Sullivan and Annabel Cohen; Singing across the lifespan: Active and passive behaviors.

Petra Hauf, Patricia Brosha and Jennifer Sullivan: Six month old infants actively shift their attention while watching and listening to infant-directed singing and speaking of familiar and novel lyrics.

Sisi Pan, Bing-Yi Pan, Jonathan Lane, and Annabel Cohen: The influence of native language (Chinese vs. English) and personality on performance tests of singing.

Erica Ross, Michael Leblanc, and Bing-Yi Pan: An age cross-sectional study of singing skills: Preliminary results.

Jennifer Sullivan and Lindsay Coombs: A longitudinal investigation of young children's singing: singing a favourite song versus creative song production.



**International Society for Music Education**, Thessaloniki, Greece, July 15-20. AIRS was represented at ISME by Lily Chen-Hafteck who spoke about the cross-cultural songbook project, and several members in attendance met for a working lunch including Caroline Van Niekirk from Pretoria, South Africa.

Lily Chen-Hafteck: Advancing Interdisciplinary Research in Singing (AIRS): International Project on Cultural Understanding.

**International Conference of Music Perception and Cognition**, Thessaloniki, Greece, July 23-28. AIRS was represented ICMPC held in Thessaloniki, Greece, and a dinner meeting took place with Jane Ginsborg, Richard Parncutt, Mayumi Adachi, Jaan Ross

Mayumi Adachi and Simone Falk: Does native language influence the mother's interpretation of an infant's musical and linguistic babblings.

Marju Raju and Jaan Ross: Vocal improvisations of Estonian children.

## 5. Meeting the AIRS Milestones

Our attention is continually directed to and by the milestone document, from the perspective of the sub-themes, and their cross-fertilization:

Development:

- 1.1 Perception/Production (Christine Tsang, Laurel Trainor – co-leads)
- 1.2 Multimodal (Frank Russo, Sandra Trehub – co-leads)
- 1.3 AIRS Test Battery (Annabel Cohen – lead)

Education:

- 2.1 Learning to sing naturally (Patricia Campbell – lead)
- 2.2 Formal training (Darryl Edward – lead)
- 2.3 Teaching through singing (Andrea Rose, Jennifer Sullivan – co-leads)

Well-being:

- 3.1 Cross-cultural understanding (Godfrey Baldacchino, Lily Chen-Hafteck co-leads)
- 3.2 Intergenerational understanding (Rachel Heydon, - lead)
- 3.3 Health benefits of singing (Jennifer Nicol – lead)

The first 3 years of the grant have served to engage researchers in addressing the milestones of their theme. Only after establishment of a strong foundation in a theme does it makes sense to consider cross fertilization. Cross

fertilization benefits from strengths of the separate entities. We might look at this process as one of first engaging team leaders, then team members, and only then reaching across to other sub-themes. Collaborations across sub-themes within and across the three major themes are taking place and are highly consistent with the Milestone goals. AIRS research thrives through the sharing of information, and through the good-will among collaborators. All of this was in play and further fostered at the Annual meeting.

## 6. AIRS 5<sup>th</sup> Annual Meeting August 11- 12, 2013, Toronto! & future meetings of interest to AIRS Collaborators

### Preliminary Announcement of AIRS 5

The **AIRS 5<sup>th</sup> Annual Meeting** will take place in Toronto August 11 and 12, 2013 immediately following the biennial meeting of the Society for Music Perception and cognition which is being hosted at Ryerson University, August 8-11. Frank Russo is the SMPC Conference Organizer. As standard, travel support for at least one student from each of the 9 sub-themes will be awarded through a competition: see the [AIRS Travel Policy](#), on the web-site.

**Other opportunities** for AIRS members to come together are provided by other meetings at which symposia, paper sessions, or poster groupings from AIRS would be welcome. At such meetings, efforts can be made to schedule a special pre- or post- meeting workshop, focusing on a special topic connected to singing, or such a session might be incorporated into the program. Please think about these possibilities.

The following is a list of conferences of possible interest to AIRS members. Deadlines are shown only if they have not passed.

**All dates in 2013 unless otherwise noted:**

- [Society for Research in Child Development](#), Seattle, Washington, **April 18-20**
- [Canadian Association of Music Therapy](#), Saskatoon, SK **May 9-11**
- [Canadian Society for Brain, Behavior & Cognitive Science](#), Calgary, AB, **June 7-9**





- [International Conference on Music and Emotion](#), Jyväskylä, Finland, **June 11-15**, deadline Dec. 7, 2012
- [Canadian Psychological Association](#), Montreal, QC, **June 13-15**
- [Phenomenon of Singing IX](#), St. John's NL, **July 7-10**
- [American Psychological Association](#), Honolulu, Hawaii, **July 31-Aug. 4**, deadline Nov. 16, 2012
- [Society for Music Perception and Cognition](#), Toronto, ON **Aug 8 – 11 (in conjunction with AIRS 5<sup>th</sup> Annual Meeting August 12)**
- [International Symposium on Performance Science](#), Vienna, Austria, **August 28 – 31**, deadline Nov. 30, 2012

## 7. Project Manager's Messages

### Upcoming AIRS Deadlines:

#### Student funding for Year 5:

The process for Year 5 student funding applications will begin in **January, 2013**. You will receive an updated template and specific instructions at that time. The deadline for applications is **February 28, 2013**. The deadline will be strictly adhered to and submissions received after that date will not be considered unless the full budget is not disbursed for the submissions received on time.

#### Project status reporting:

An on-line report form is being created and is expected to be ready by December 1. All collaborators will receive instructions and be asked to complete this form. In future, the form will be completed quarterly and will avoid a year-end rush and will enable better communication of activities throughout the collaboration.

### Current action requests for AIRS Co-investigators and Collaborators:

#### Edited Book Series submissions:

Submissions for the edited book series are still being requested. Access the form [Abstract Submission for AIRS Edited Book Series on Interdisciplinary Research in Singing: Volume 1 Development, Volume 2, Education and Volume 3 Well-being](#) on the AIRS web site to submit.

### Web site information

Please review your contact and background information on the [AIRS web site](#) and verify that everything is current. If we don't yet have a photo for you, or if you want your photo updated, please provide a current photo. All updates to the web site should be submitted to Ross Dwyer at <mailto:rdwyer@upei.ca>.

### Upcoming AIRS Meeting dates (all times are Eastern Standard unless stated otherwise):

November 9 – Policy and Planning Committee 1 pm  
November 27 – Steering Committee meeting, 1 pm  
December 18 – Steering Committee meeting, 1 pm

### Potential upcoming meetings:

AIRS sub-theme and theme leaders should be planning for the following meetings:

Sub-theme meetings

Theme meetings

Synergy and cross-pollination meetings

AIRS videoconferencing is available for these meetings. Please contact AIRS staff for assistance in the organization and recording of meetings.

## 8. Final Remarks from the Director

The co-operation of AIRS members has been astounding, as our progress shows. Such multidisciplinary work as we undertake, especially that across distances and cultures, is hard, but the rewards are many as we listen to each other with open ears, minds and hearts. I look forward to much further progress as we move through our next milestones, and as the data pour in and the publications pour out. Realizing it is not that simple, I wish you all well in our exciting and groundbreaking work ahead. Do mark the next AIRS Annual Meeting on your calendar –Toronto, August 11 and 12, 2013. Stay tuned for the next edition of the *AIRS Message di Voce*.

Annabel Cohen, Ph. D., ARCT  
Director AIRS  
[acohen@upei.ca](mailto:acohen@upei.ca)

