Dear Committee Members,

I am writing to apply for the Van Lawrence Fellowship. I am a faculty member in the music department of Ambrose University in Calgary, Canada where I teach applied undergraduate voice and voice pedagogy. I am also the voice consultant at Breathe Well Physio in Calgary where I collaborate with a physiotherapist who specializes in treating patients with respiratory diseases. Many of our clients within the physiotherapy clinic experience breathlessness and poor airflow as a result of their illnesses and it follows that they experience comorbid dysphonia. I hope to use the Van Lawrence Fellowship to further investigate the relationship between deficient airflow and voicing in patients living with lung disease.

My intended topic: Dysphonia in patients with chronic obstructive pulmonary disease (COPD), asthma and idiopathic pulmonary fibrosis (IPF). It has been well established in the literature that airflow must be consistent to produce an efficient glottal wave in both the singing and speaking voice. When this airflow is compromised by obstructive or restrictive conditions in the respiratory tract, other laryngeal structures will compensate for the deficiency in the powerhouse. While much attention has been paid to the necessity of good breathing patterns in healthy singers and speakers, there is a paucity of research investigating breathing patterns in individuals with compromised respiratory tracts and the subsequent effects on their voice. I hope to determine if dysphonia or vocal handicap is present in individuals with COPD, asthma or IPF, which voice pathologies are present in this population, and which pedagogical or therapeutic methods are effective at alleviating these conditions.

Many of our clients are hoarse and complain about limited vocal intensity, range and stamina. Ultimately this is a quality of life issue as they have lost their ability to communicate effectively in addition to experiencing anxiety about their respiratory diagnosis. According to data from the Canadian Institute for Health Information, approximately 1 in 5 Canadians live with lung disease. While over 64,000 people in Alberta are living with COPD, only 1000 of those patients have publicly funded access to ongoing rehabilitative care, leaving many people in limbo. Furthermore, in our health region, wait times for laryngological exams with a focus on voice are currently 2-4 months for emergent cases and 12-14 months for those without significant health risk. Although we often refer our clients on for laryngological exams, we aim to fill the gap in pulmonary and voice rehabilitation by providing an accessible program. We offer an “in-the-meantime” approach that includes breath and vocal technique retraining, and vocal health and hygiene education.

In December 2017, I co-founded “Breathe, Sing, Move!” with my physiotherapist colleague. This weekly program combines group singing lessons with physiotherapy to help individuals living with lung disease. Since the initial 14 week course, we have offered three iterations of the program, collecting pilot data in each session to determine the effects of traditional singing lessons and physiotherapy on the respiratory complaints, quality of life, and voice handicap of individuals with lung disease. In the initial program, the majority of our participants reduced their voice handicap, as determined by the Voice Handicap Index, by an average of 36% (P=0.02). We also found significant reductions in fatigue.
(P=0.018) and increases in mastery (P=0.015) as determined by the Chronic Respiratory Questionnaire. Examples of pedagogical tools used in the program include stretches, body mapping and awareness exercises, inspiratory muscle training, movement with resistance bands, exhalation with a Flowball, semi occluded vocal tract exercises, traditional vocalizes using triads and five note patterns, and voice repertoire. If awarded the Van Lawrence Fellowship, I hope to continue investigating the efficacy of my pedagogical methods at reducing voice handicap and add laryngological examinations and acoustic evaluations to our outcome measurements to determine the presence of pathology and/or dysphonia.

I have been a NATS member since 2008 and I currently serve as President of the Calgary chapter. I also chair our annual competition. I have recently published an article in the Journal of Voice titled: Singing Lessons for Respiratory Health: A Literature Review. My doctoral dissertation focused on the use of singing lessons to improve the pulmonary function and quality of life of adult cystic fibrosis patients. I have presented my research a number of times at the Voice Foundation and other conferences. As such, I am well poised to collaborate with medical professionals to conduct my research.

I am fortunate to work with a variety of singers in my studio. As a highly trained singer, singing voice specialist (SVS) and pedagogue, I use evidence based pedagogy daily in my studio whether I am working with my undergraduate voice majors, my private students, or my clients in the physiotherapy clinic. It is my hope that the research I conduct under the guise of the Van Lawrence will help champion the cause of respiratory patients and demonstrate the necessity for access to voice care.

Thank you for your consideration,

Dr. Rachel Goldenberg
Ambrose University
Professional Profile

**Voice Teacher**

- **Sessional Instructor of Voice and Voice Pedagogy at Ambrose University in Calgary, AB.**
  - Applied voice lessons to all enrolled voice students.
  - Voice Pedagogy (3 credit) course taught biennially.
  - Student directed studies such as History of Song Literature.
  - Weekly voice masterclass with all voice students.
- **Co-Founder of “Breathe, Sing, Move!” at Breathe Well Physio in Calgary, AB.**
  - Weekly program combines physiotherapy with group singing to help respiratory patients.
  - Funding provided by the Lung Association of Alberta and the Northwest Territories.
- **Voice Consultant at Breathe Well Physio in Calgary, AB.**
  - Vocal health and hygiene education, and voice retraining for people with respiratory disease and/or voice disorders.
- **Member of National Association of Teachers of Singing (NATS)**
  - President to Calgary Chapter (2016-present)
    - Coordinate and oversee yearly operations, biannual meetings and professional development of Calgary NATS Chapter.
    - Communicate with Regional and District Governors and National Office on behalf of the chapter.
  - Secretary to Calgary Chapter (2011-2016)
  - NATS Calgary Songfest Chair and Coordinator (2015-present)
    - Organize and schedule over 100 voice students in over 20 classes.
    - Organize and coordinate volunteers to adjudicate and emcee each class.
    - Organize annual awards concert featuring winners of each class. Coordinate scholarship donations and distribution to winners.
  - **Member of Alberta Registered Music Teacher’s Association (ARMTA)**
    - Member of Examination Committee to determine eligibility of new members.
- **Member of Pan American Vocology Association (PAVA)**
  - Students are winners of awards and scholarships.

**Clinician**

- 2018 Camrose Music Festival (Camrose, AB): Voice Adjudicator
- 2017 Bow Valley Music Festival (Canmore, AB): Voice Adjudicator
- 2014 Lethbridge Kiwanis Festival (Lethbridge, AB): Senior Voice Adjudicator
Vocal Health and Pedagogy: Arming Yourself for Life as a Singer (The Sampler)” Lecture presented at the 2011 and 2012 Cowtown Opera Summer Academy (Calgary, AB) and 2011 NATS Calgary Professional Development Workshop.

Conference Presentations

- “Singing and Cystic Fibrosis: Rationale and Scientific Underpinnings for the Use of Voice Lessons as an Adjunct Treatment.” Lecture presented at the Inaugural Symposium of Quantitative Research in Music and Medicine, June 3, 2011 at Weber State University in Ogden, UT.

Publications


Performer

- Soloist-NATS Calgary Annual Teacher Recital 2013-present.
- Solo Recital on behalf of Calgary Arts Summer School, April 22, 2017.
- Frequently sought out as soloist within community.
- Performances throughout Canada and the United States.

Elementary/Middle School Music Teacher

- Taught general music and music history at St. Catherine’s School to grades K, 1, 2, 5, 7, 8.
- Directed the Middle School Handbell Choir.
- Wrote, organized, and directed multiple musicals involving 60 or more elementary students.
Education

Shenandoah Conservatory of Shenandoah University, Winchester, VA

Dissertation Title: Singing and Cystic Fibrosis: A Collective Case Study on the Effects of Private Voice Lessons on the Pulmonary Function and Quality of Life of Adult Cystic Fibrosis Patients.

Dean’s Graduate Scholar Award Winner for “Exceptional Aptitude for Research and Scholarship.”

Westminster Choir College of Rider University, Princeton, NJ

Westminster Choir College of Rider University, Princeton, NJ

Principle Teachers

Voice
Lindsey Christiansen
Gran Wilson
Charlotte Nelson Aiosa
Carmen Tellier

Voice Pedagogy
Marvin Keenze
Scott McCoy
Kathryn Green
Jeanette LoVetri
Philip Sargent
Wendy LeBorgne
Johan Sundberg

Coaches
J.J. Penna
Dalton Baldwin
Laura Ward
Debra Scuro-Davis
Jose Ramos-Santana
Stephen Sharp
Eileen Craig

Piano Pedagogy
Ingrid Clarfield
Phyllis Lehrer
Jean Stackhouse
Lillian Livingston

Piano
Jose Ramos-Santana
Stephen Sharp
Eileen Craig

Choir
Joseph Flummerfelt:
Westminster Symphonic Choir (2002-2005)
Andrew Megill:
Heather Buchanan:
James Jordan:
Westminster Chapel Choir (2000-2001)

Select Professional Development

• NATS Internship Program; University of Wisconsin: EauClaire, 2011
• The Function of the Singing Voice (course by Dr. Johan Sundberg); Sweden, 2010
• Observational Internships:
  Dr. Wendy LeBorgne Ph.D; Dayton, OH, 2010
  Blaine Block Institute of Voice Analysis and Rehabilitation
  Leda Scearce; Durham, NC, 2010
  Singing Voice Specialist at Duke Voice Care Center, Duke University
  Dr. James P. Thomas M.D.; Portland, OR, 2010
  Observed vocal fold surgery and patients with voice disorders
  • Shenandoah University; Winchester, VA, 2008
  Contemporary Commercial Music Institute Levels I,II,III
• Musikinesis Workshop; The Levine School of Music, Rockville, MD, 2007
• Banff Centre for the Arts; Banff, Alberta, 2006
• Music Together Teacher Training, 2006
• Opera Nuova; Edmonton, Alberta, 2004

Employment History
Voice Consultant and Clinician
Breathe Well Physio, Calgary, AB
2018-present

Sessional Music Instructor-Voice
Ambrose University College, Calgary, AB
2014–present

Private Voice Teacher
Calgary, AB
2010–present

Private Voice and Piano Teacher
Richmond, VA
2006-2010

General Music and Voice Teacher
St. Catherine’s School, Richmond, VA
2006–2009

General Music Teacher
Westminster Canterbury Childhood Development Centre, Richmond, VA
2006

Music Together Teacher
Richmond, VA
2006

Graduate Assistant, WCC Dean’s Office
Westminster Choir College, Princeton, NJ
2004-2005

Junior Faculty Piano Teacher
Westminster Conservatory, Princeton, NJ
2003-2004

Performance Awards
National Semi-Finalist and Lee Cass Award winner, NATSAA, Boston NATS Conference, 2014
1st Place, National Association of Teachers of Singing Artist Awards (Intermountain Region), 2014
2nd Place, National Association of Teachers of Singing Artist Awards (Intermountain Region), 2012
Finalist, National Association of Teachers of Singing Artist Awards (Alberta District), 2012
Nominee, Outstanding Performance by Leading Actress in a Musical (The Sorcerer), Calgary ACTS, 2011
Finalist, Shenandoah Conservatory, Student Soloist Competition, 2009
1st Place, New Jersey NATS, Advanced Upper, 2005
1st Place, New Jersey NATS, Advanced Lower, 2004

Roles

**Opera**

Mother
_Amahl and the Night Visitors_
Menotti
Ambrose University
2018

Dew Fairy
_Hansel and Gretel_
Humperdinck
Cowtown Opera
2012

Aline
_The Sorcerer_
Sullivan
Morpheus Theatre
2011

Chorus
_La Traviata_
Verdi
Chesapeake Concert Opera
2010

Chorus
_L’Elisir d’Amore_
Donizetti
Chesapeake Concert Opera
2010

Fairy Godmother
_The True Story of Cinderella_
Martin
Da Capo Institute
2008

2nd Spirit
_The Magic Flute_
Mozart
Banff Centre for the Arts
2006

Ilia
_Idomeneo (scenes)_
Mozart
Banff Centre for the Arts
2006
Alice Ford  
*The Merry Wives of Windsor (scenes)*  
Nicolai  
Westminster Opera Workshop  
2005

Mme. Silberklang  
*The Impressario (scenes)*  
Mozart  
Westminster Opera Workshop  
2005

Zerlina  
*Don Giovanni (scenes)*  
Mozart  
Opera Nuova  
2004

Susanna  
*Le Nozze di Figaro (scenes)*  
Mozart  
Opera Nuova  
2004

**Music Theater**

Maria  
*Westside Story (scenes)*  
Bernstein  
Opera Nuova  
2004

Amy  
*Company (scenes)*  
Sondheim  
Opera Nuova  
2004

**Oratorio**

Soprano soloist  
*Messiah*  
Handel  
Ambrose University  
2018

Soprano soloist  
*Psalm 42*  
Mendelssohn  
Ambrose University  
2015

Soprano soloist  
*Messiah*  
Handel  
Ginter Park Presbyterian Church  
2007

**Select Performances as Chorister**

*The Miraculous Mandarin*  
Bartok  
Cleveland Orchestra, Pierre Boulez  
2005

*La Damnation de Faust*  
Berlioz  
New York Philharmonic, Charles Dutoit  
2005

*Missa Solemnis*  
Beethoven  
Westminster Festival Orchestra, Joseph Flummerfelt  
2004

*Requiem*  
Brahms  
New Jersey Symphony Orchestra, Nemi Järvi  
2004

*Messiah*  
Handel  
New York Philharmonic, Alan Gilbert  
2004

*Beatrice and Benedict*  
Berlioz  
New York Philharmonic, Sir Colin Davis  
2003

*Symphony IX*  
Beethoven  
New York Philharmonic, Lorin Maazel  
2003

*Requiem*  
Berlioz  
New York Philharmonic, Charles Dutoit  
2003

*Messiah*  
Handel  
New York Philharmonic, Nicholas McGegan  
2003

*Messiah*  
Handel  
New York Philharmonic, Sir Neville Mariner  
2002