

Andrew Goldman – Curriculum Vitae

ajg2232@columbia.edu
Center for Science and Society
Columbia University

Positions

Presidential Scholar in Society and Neuroscience 2015-present
Center for Science and Society
Columbia University

Education

PhD University of Cambridge 2015
Supervisor: Prof. Ian Cross
Dissertation: *The cognition of musical improvisation: The value and experimental implementation of a new scientific approach*
Funding: Cambridge International Student Scholarship

MPhil University of Cambridge, Musicology 2011
Graduated with distinction
Thesis: *What does one know when one knows how to improvise? An empirical investigation into cognitive models of improvisation*
Supervisors: Prof. Ian Cross, Prof. Sarah Hawkins

BA University of Southern California, Neurosciences 2008
Graduated *summa cum laude*

BM University of Southern California, Piano Performance 2008
Graduated *summa cum laude*

Teaching Experience

University of Cambridge 2011-2014
Supervisor

As a supervisor, I meet with students in small groups and lead seminars, assign reading and coursework, mark coursework, set up and mark mock exams, and otherwise assist students with preparing for course exams and supplementing the main lectures for the course given by faculty members. Also, I supervise undergraduate dissertations by assigning reading, offering guidance, and marking drafts.

Undergraduate course, Part IA: Music and Musicology Today

This course is a survey of the various disciplines comprising modern musicology (including sociology, history, psychology, performance studies, analysis, ethnomusicology, and others).

Undergraduate course, Part IB: Introduction to Music and Science

This course covers scientific approaches to music including acoustics, psychoacoustics, psychology, cognitive science, and neuroscience.

Undergraduate course, Part IB: Introduction to Performance Studies

This course surveys the various disciplines that comprise performance studies including sociology, history, and psychology.

Undergraduate course, Part II: Perception and Performance (dissertation)

Students complete a scientific experiment on a musical topic. I help design the experiment and guide students through the proper analyses and interpretations of results.

Undergraduate course, Part II: Analysis Portfolio (dissertation)

Students write a dissertation on a topic of their choice employing various methods of music analysis.

Outreach Lectures

2011-2014

I give occasional lectures for schoolchildren and residents in Cambridge, UK for various outreach events that invite visitors to learn about the activities in the music department at the University.

Wolfson College, Cambridge

2011-2014

Music Theory Instructor

I designed and launched a music theory class for members of Wolfson College. I teach an introductory course about music theory and aural skills and have also taught an intermediate version of the class.

Brevard Music Center

2010

Faculty Member

The Brevard Music Center is a six-week summer music festival and educational institute for high school students and university students. I designed and taught an introduction to musicology course for high school students, delivered pre-concert lectures for the orchestral performances at the center, and wrote program notes.

University of Southern California

2007-2008

Teaching Assistant

I assisted in teaching a class piano course for non-piano majors.

Private Music Teacher

2004-present

I have experience teaching private piano, composition, and music theory lessons.

Research Experience

Centre for Music and Science

2010-2015

University of Cambridge
Graduate student researcher (MPhil, PhD)
Research topic: Music cognition
Supervisor: Prof. Ian Cross

Brain and Creativity Institute

2009-2010

University of Southern California
Research assistant
Research topic: Neuroscience of social emotions
Supervisors: Prof. Mary Helen Immordino-Yang, Prof. Antonio Damasio

Institute of Cognitive Neuroscience

2008

University College London
Undergraduate research assistant
Research topic: Neuroscience of face recognition
Supervisor: Dr. Bradley Duchaine

Other research experience

2007-2008

University of Southern California
As an undergraduate, I worked with Prof. Irving Biederman (visual cognition) and Prof. Elsi Kaiser (linguistics)

Publications

Peer Reviewed Journal Publications

Goldman, A. (accepted). Improvisation as a way of knowing. *Music Theory Online*.

Goldman, A., & Sajda, P. (submitted). Comparing perception-action coupling between improvisers and classical musicians with a novel EEG Stroop task.

Goldman, A. (2013). Towards a cognitive–scientific research program for improvisation: Theory and an experiment. *Psychomusicology: Music, Mind, and Brain*, 23(4), 210-221.

Kim, J. G., Goldman, A. J., & Biederman, I. (2008). Blind or deaf? A matter of aesthetics. *Perception*, 37(6), 949.

Other Journal Publications

Goldman, A., Hannaford, M. (2016). The Challenge of Comparing Improvisation across Domains. *American Music Review*, Vol. XLV, No. 2.

Book Reviews

Goldman, A. (2015). Alexandra Hui, *The Psychophysical Ear: Musical Experiments, Experimental Sounds, 1840-1910*. *Psychology of Music*.

Conference Proceedings

Goldman, A. (2012). What does one know when one knows how to improvise. In *Proceedings of the 12th International Conference on Music Perception and Cognition* (pp. 360-368).
(*finalist for SEMPRES young researcher award, full travel bursary awarded*)

Conference Presentations and Invited Lectures

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| <p>American Musicological Society and Society for Music Theory Joint Conference
 Vancouver, Canada
 Conference paper: Linking formal structures to improvisatory process with cognitive science.</p> | 2016 |
| <p>Performance Studies Network Fourth International Conference
 Bath, UK
 Conference paper: “Do experienced improvisers perceive music differently from non-improvisers?”</p> | 2016 |
| <p>International Conference for Music Perception and Cognition
 San Francisco, CA
 Conference paper: “Improvisation as a way of knowing”</p> | 2016 |
| <p>Dalcroze Society of America Symposium and Conference
 Princeton, NJ
 Conference paper: “Using Neuroscience to Characterize an Improvisatory Way of Knowing”
 Invited response to keynote</p> | 2016 |
| <p>International Society for Improvised Music Conference
 Waterloo, Guelph, and Toronto
 Conference paper: “Improvisation as a way of knowing”</p> | 2016 |
| <p>Seminar in Society and Neuroscience: Neuroscience & Education
 Columbia University
 Moderator and co-organizer</p> | 2016 |
| <p>Embodied Cognition Workshop: Music and Movement
 Columbia University
 Invited response: “Embodiment and improvisation: The case of live coding”</p> | 2016 |
| <p>Seminar in Society and Neuroscience
 What does neuroscience have to offer the study of creativity?
 Columbia University
 Moderator and co-organizer</p> | 2016 |
| <p>The Improvising Brain II: Multiple Perspectives
 Georgia State University
 Conference paper: “Towards a cognitive-scientific definition of improvisation”</p> | 2015 |
| <p>Auditory Perception Group, University of Cambridge
 Invited Lecture: The cognition of musical improvisation</p> | 2014 |
| <p>Pedagogy and the Academy Today (conference sponsored by the British Academy)
 Oxford, UK
 Invited Lecture: Musical Improvisation, Cognition, and Pedagogy</p> | 2014 |
| <p>International Conference on Music Perception and Cognition and
 Asian-Pacific Society for the Cognitive Sciences of Music joint conference
 Seoul, South Korea
 Conference Paper: Delayed auditory feedback disrupts improvised piano playing more than memorized playing:
 Towards a cognitive characterization of improvisation</p> | 2014 |

- Performance Studies Network Third International Conference** 2014
University of Cambridge
 Conference Paper: What could be universal about musical improvisation? Situating the cognitive approach
- Wolfson College Research Event** 2014
Wolfson College, Cambridge
 Conference Paper: Delayed auditory feedback disrupts improvisation more than memorized performance in piano playing
- Birmingham Conservatoire, UK** 2013
 Invited Lecture: The cognition of musical improvisation (and other scholarly approaches to improvisation)
- Danby Society, University of Cambridge** 2013
 Invited Lecture: Why is it difficult (but not impossible) to study music scientifically?
- Language Sciences in the 21st Century: The Interdisciplinary Challenge,**
University of Cambridge 2013
 Poster Presentation: Syntax at the interface between a musical performer and instrument
- SysMus13 (Systematic Musicology Graduate Student Conference)** 2013
CasaPaganini-InfoMus Research Centre, Genoa, Italy
 Conference Paper: How to ask questions about the cognition of musical improvisation
- Wolfson College Lunchtime Seminar Series** 2013
 Invited lecture: Scientific Approaches to Musical Improvisation
- Wolfson College Research Event** 2013
Wolfson College, Cambridge
 Poster: But can they really hear it? Perceptual-motor mappings in jazz pianists
 Awarded 2nd Prize for Best Poster
- The Improvising Brain** 2013
Georgia State University
 Conference paper: “But can they really hear it? Perceptual-motor mappings in jazz pianists”
- International Conference for Music Perception and Cognition and
 European Society for the Cognitive Sciences joint conference** 2012
Thessaloniki, Greece
 Conference paper: “What does one know when one knows how to improvise?”
- Perspectives on Musical Improvisation, University of Oxford** 2012
 Conference paper: “What does one know when one knows how to improvise?”
- Graduate Research Forum** 2011
University of Cambridge
 Invited Lecture: A presentation of my MPhil research
- University of Southern California Trustee’s Retreat** 2010
 I represented the Brain and Creativity Institute with two other graduate students and presented my research interests to the trustees of the university.
- KUSC Website Feature** 2007
 Together with the other members of the Thornton School of Music Outreach Ensemble at the University of Southern California, I recorded a feature for an educational website built by KUSC.

Other Professional Activities

- Columbia Embodied Cognition Reading Group** 2016-present
Co-organizer
 I co-organize a discussion group that brings together scholars in many domains to discuss various theories and practices associated with embodied cognition. We organize regular meetings and special seminars.
- Comparing Domains of Improvisation Discussion Group** 2015-present
Co-organizer
 I co-organize a discussion group that brings together improvisers and scholars in many domains to discuss differences and commonalities in our understanding of improvisation and related concepts.
- Ad hoc reviewing** 2014-present
 I have served as a peer reviewer for *Musicae Scientiae* and *Psychomusicology: Music, Mind, and Brain*
- The Improvising Brain II: Multiple Perspectives** 2014
 Conference steering committee member (including responsibilities to review abstracts and make practical preparations for the conference). Conference in Atlanta in 2015.
- SysMus14** 2014
 Conference steering committee member (including responsibilities to review abstracts and make practical preparations for the conference). Conference in London in 2015.
- King's Junior Voices** 2012-2015
 I am the accompanist for the King's Junior Voices, a children's choir led by Lynette Alcántara. This also involves occasionally teaching groups of young choristers. We have several performances per year.
- Faculty of Music** 2012-2013
Graduate Research Forum Co-Organizer
 Together with another graduate student, I invited four graduate speakers per term to present papers and works-in-progress for the graduate students at the faculty.
- Centre for Music and Science** 2011-2013
Seminar Organizer
 I organized the graduate seminars by choosing topics and reading for a series of discussions and by inviting fellow graduate students to choose topics and reading.

Community Service

- Top Honors** 2016-present
Volunteer Math Tutor
 I volunteer to tutor middle school math on weekends.
- Wolfson College Music Society** 2012-2015
President
 I served as the president of the Wolfson College Music Society. I organized the Saturday Lunchtime Concert Series at Wolfson College, served as the choir accompanist, performed to raise funds for the college's fund for a new piano, organized a fundraiser that raised over £7,000 for that piano fund, provided and helped people find various musical resources in Cambridge, and helped organize various other activities in the society including co-organizing a Sunday "Jam Session" for musicians in my college.

Cambridge Music Education Outreach (CaMEO) 2012-2014**Volunteer**

I participated in events for CaMEO including

-“The mind behind the music: A day of Music and Science discovery for teenagers” – annual presentation on acoustics for visiting schoolchildren.

-“Play me I’m yours” – when the international art project came to Cambridge, I performed and gave free lessons on an organized day of celebration for the pianos.

Faculty of Music, University of Cambridge 2012**Graduate Representative**

I was elected to represent the interests of graduate students in the music faculty by sitting on the faculty board committee, student-staff committee, and by organizing various other meetings with graduate students.

Wolfson College, Cambridge 2011-2012**Welcome Committee Member**

I assisted students with moving into Wolfson College, gave college tours, distributed information, and assisted with various other aspects of settling into Cambridge.

University of Southern California 2007**Thornton Outreach Ensemble Pianist**

Together with two other music students, I performed and gave educational presentations for students in local elementary schools in Los Angeles.

California Association of Professional Music Teachers 2006-2007**University of Southern California Chapter Vice President, Director of Outreach**

I helped organize outreach events with this organization for music students to perform in the Los Angeles area.

Other Activities

Science! The Musical. 2014

I wrote the music, lyrics, and book for this new musical about life in the lab. I worked as co-producer, musical director, pianist, and as a member of the acting cast for the premier production which was staged for a run of five performances in Cambridge, UK, 18-22 February 2014. The show is available for production.

Wolfson College Chess Club 2011-2012**Founder**

I started a casual chess club for students in Wolfson College. We met weekly during term time to play games and discuss tactics and strategy.

Cambridge University Chess Club 2011-2015**Member****Cambridge University Musical Society Chorus** 2010-2014**Bass 1**

I sing bass in this chorus. We perform each term in Cambridge (3-4 performances per year) and go on tour each year. I have toured with this group in Tallinn, Estonia and Paris, France.

Wolfson College Choir and Chamber Singers 2010-2015**Bass 1**

I am a member of both the choir and the chamber singers. I also serve as the accompanist for both groups. We perform at college events and give several concerts per year. I have toured with the choir to Thessaloniki, Greece and southern France.

Media Appearances

- Friday Afternoons Performance** November, 2013
To celebrate Benjamin Britten's centennial, I accompanied 350 young choristers *in situ* (including the King's Junior Voices) and many more via live streaming for a performance of his work, Friday Afternoons. The performance was featured on BBC's Look East (local news program) and was also streamed live on The Guardian's music page and on a website set up for other choirs to join in around the world.
- Improvisation und Improvisieren (III) – Michael Rösenberg, host** May, 2013
I was interviewed on Michael Rösenberg's radio show on WDR3 in Cologne, Germany.
- CamFM Classical Hour – Alan Bowman and Alice Buckley, hosts** November, 2012
I was interviewed about my musical activities on student radio in Cambridge, UK.

Recent Musical Performances

- University of Kentucky, Niles Gallery** December, 2014
A concert of chamber music for cello and piano (with Andrea Kleesattel, cello)
- Cambridge Impronauts** December, 2014
I provided improvised piano music to accompany a series of five improvised plays over five nights of performances.
- Takarazuka International Friendship Association Recital** July, 2014
A chamber music recital with members of the Hyogo Performing Arts Center Orchestra, Takarazuka, Japan
- Music and Madeira** May, 2014
A solo piano concert at Wolfson College.
- Music at 22 Mansfield Street (London Concert Series)** March, 2014
A concert of chamber music for cello and piano (with Andrea Kleesattel, cello)
- Wolfson College Lunchtime Recital Series** March, 2014
A concert of chamber music for cello and piano (with Andrea Kleesattel, cello)
- West Road Concert Hall (Cambridge, UK)** January, 2014
A concert of works for two pianos and piano four hands (with Jiayi Liu, piano)
- Rhapsody Hall (San Diego State University)** December, 2013
A concert of chamber music for cello and piano (with Andrea Kleesattel, cello)
- King's College Chapel (University of Cambridge)** September, 2013
Brahms *Ein deutsches Requiem* come-and-sing event (Stephen Cleobury, conductor, Andrew Goldman and William Cole, piano 4-hands)
- Cambridge University Musical Society Symphony Orchestra
Concerto soloist (Barber Piano Concerto)** November, 2012
I was awarded the opportunity to perform with this group by being joint-winner of the 2012 Cambridge University Musical Society concerto competition.
- Mary Bevan Recital
Solo piano** June, 2012
I was invited to give the annual Mary Bevan Recital at Wolfson College Cambridge together with a harpist who played a solo program as well.

Emmanuel College, Cambridge concert series May, 2012
Solo piano recital
 Works by Beethoven and Brahms

Wolfson College Lunchtime Recital Series February, 2012
Solo piano
 This was a concert I performed to fundraise for the Wolfson College Choir's 2012 tour to Greece.

Honors and Awards

Cambridge International Student Scholarship 2011-2014
 Full university and college fees for PhD study plus £10,750 per year stipend

Cambridge Overseas Trust Scholarship 2010-2011
 £6,000 contribution towards fees for MPhil study

Renaissance Scholar Award, University of Southern California 2008
 \$10,000 prize at graduation for academic performance in disparate academic disciplines

Discovery Scholar Certification, University of Southern California 2008
 Graduation honors for excellence in artistic achievement

Commencement Ceremony Flag-bearer, University of Southern California 2008
 An honor awarded for academic accomplishments in the school of music

Phi Beta Kappa, Phi Kappa Phi, Pi Kappa Lambda, Psi Chi, Golden Key 2007-2008
 Academic honor societies in which I have been inducted

Dean's List, University of Southern California 2007-2008
 Every semester while at USC

Other scholarships while at the University of Southern California 2004-2008
 Town and Gown Scholar, Dean's Scholarship, Charles K. Lick Scholarship, Maxwell Hazlett Memorial Scholarship, Dean Joan Schaefer Scholarship

References

Prof. Ian Cross
 Professor of Music and Science
 Faculty of Music
 University of Cambridge
 +44 (0)1223 335185
 ic108@cam.ac.uk
 (PhD supervisor)

Ms. Lynette Alcántara
 Director of Music, Wolfson College
 University of Cambridge
 music@wolfson.cam.ac.uk
 (Mentor and musical colleague)

Prof. John Rink

Professor of Musical Performance Studies
Director of Studies, St. John's College
University of Cambridge
+44 (0)1223 746413
jsr50@cam.ac.uk
(Mentor and academic advisor)

Prof. Antonio Damasio

David Dornsife Professor of Neuroscience
Director, Brain and Creativity Institute
University of Southern California
+1 (213) 740-3462
damasio@usc.edu
(Mentor)

Prof. Adam Gilbert

Director, Early Music Program
University of Southern California
+1 (213) 740-3211
akgilber@usc.edu
(Mentor and undergraduate professor)

Prof. Mary Helen Immordino-Yang

Assistant Professor, Rossier School of Education
Assistant Professor, Brain and Creativity Institute
Faculty in the Neuroscience Graduate Program
University of Southern California
+1 (213) 821-2969
immordin@usc.edu
(Mentor and former employer)

Prof. Jane Mitzi Kolar

Professor of Music – Piano and Piano Pedagogy
San Diego State University
kolar@mail.sdsu.edu
(Mentor and piano teacher)