C. Lindsay Anderson
Biological and Environmental Engineering
Cornell University,
Ithaca, NY 14853-5701

phone: 607.255.4533
email: cla28@cornell.edu
http://anderson.bee.cornell.edu

Interests and Specialization

- The long-term goal is the development of an interdisciplinary program of teaching and research that focuses on methodologies to improve integration of sustainable resources and technologies into global energy systems
- Primary research interests are in the applications of stochastic optimization to management of uncertainty in sustainable energy systems
- Current focus is on development of innovative methods to solve realistic (large) scale problems in reasonable computation time, with sufficient accuracy
- Other interests include process modeling and optimization, the impact of uncertainty on large scale systems, and the impact of inter-temporal effects in life cycle analyses

Professional Preparation

University of Guelph	Environmental Engineering	B.Sc.(Eng)	1994
University of Guelph	Environmental Engineering	M.Sc.	1998
Western University	Applied Mathematics	Ph.D.	2004

Appointments

Biological and Environmental Engineering, Cornell University: 2006-Present.
2012 – Present: Assistant Professor,
Graduate Field Memberships:
Biological and Environmental Engineering
Systems Engineering
Electrical and Computer Engineering
2009 –2012: Adjunct Assistant Professor
2006 – 2012: Senior Research Associate

- Investigating renewable resource integration in power systems through systems analysis and simulation
- Development of scalable stochastic unit commitment methodologies for incorporating high levels of variable generation
- Simulation approaches to assessing of the impact of uncertainty in biofuels and bioproducts
- Management of financial and production risks in bioproduct conversion systems

Civil and Environmental Engineering, Western University: 2004-2006
Assistant Professor

- Integration of infrastructure and market models for valuation of infrastructure investment
- Development of hybrid models to incorporate systems and market factors in energy markets

Department of Applied Mathematics, Western University: 1997-2004
Adjunct Assistant Professor, 2005 – current
Graduate Research Assistant, 2000-2004

- Developed hybrid system-econometric models for deregulated electricity markets
- Tested risk management strategies and metrics for deregulated electric power systems based on novel spot price models
- Developed system-aggregate probabilistic generator reliability models by restructuring underlying distributions for generator units

Lecturer, 1997-2001

- Applied Mathematics for Engineers (1999/2000, 2000/2001), equivalent Math 1910/1920
- Calculus I and II (1997/98, 1998/99), equivalent Math 1110 and Math 1220

Awards

- **2015 NSF CAREER Award:** Advanced Methods for Optimal Integration of Responsive Demand and Variable Generation in Power Systems and Markets. The National Science Foundation. ($500k)
- **2012 Norman R. Scott Sesquicentennial Faculty Fellowship** in Energy Systems Engineering, Cornell University
- **2010 Mr. and Mrs. Richard F. Tucker College of Engineering Teaching Award**, Cornell University
- **2004 NSERC University Faculty Award**, Faculty of Engineering, Western University (Canada)
- **2004 Cecil Graham Doctoral Dissertation Award**, from the Canadian Applied and Industrial Mathematics Society (http://www.caims.ca/prizes/cecil-graham-doctoral-dissertation-award)
- **2000 NSERC Industrial Postgraduate Scholarship,** Sponsored by Ontario Power Generation.

Invited Presentations

2015:

- Invited Speaker: 53rd Annual Allerton Conference on Communication, Control, and Computing. University of Illinois at Urbana-Champaign
- Invited Speaker: Scientific Computing and Numerics (SCAN) Seminar Series, Cornell University
- Invited Speaker: Department of Chemical Engineering Energy Seminar, Cornell University

2014:

- Invited Speaker: Department of Electrical and Computer Engineering, Cornell University, Field Seminar
- Invited Speaker: 52nd Annual Allerton Conference on Communication, Control, and Computing. University of Illinois at Urbana-Champaign
- Invited Speaker: Graduate Seminar, Department of Electrical and Computer Engineering, Arizona State University

2012:

- Invited Speaker: The Science and Engineering Challenges to the Development of Sustainable Biobased Industries Seminar Series, Cornell University
- Invited Speaker: Department of Civil and Environmental Engineering, Environmental Seminar, Cornell University

2011:

- Invited Speaker: Power Systems Engineering Research Center, Webinar Series, University of Wisconsin.

2010:

- Invited Speaker: Department of Chemical Engineering Energy Seminar, Cornell University
- Invited Speaker: INFORMS Annual Meeting, Energy Natural Resources and Environment Section. Austin, TX.
- Invited Panel Member: Sustainability Forum, Hospitality Research Summit, Cornell University

2008:

- Invited Speaker: Department of Applied Mathematics, Western University (Canada), Seminar Series.

Publications

Refereed Journal Articles

1. Luckny Zéphyr, C. L. Anderson. Integrating Storage with Power System Management: A Stochastic Dual Dynamic Programming Approach. (under review, Operations Research) Preprint available on arXiv

2. L. Cheng, M.G. Martínez, C. L. Anderson. Long Term Planning and Hedging for a Lignocellulosic Biorefinery in a Carbon Constrained World. Energy Conversion and Management *(In Press)*

3. Cheng, L., & Anderson, C. L. (2016). Financial sustainability for a lignocellulosic biorefinery under carbon constraints and price downside risk. Applied Energy, 177, 98–107. http://doi.org/10.1016/j.apenergy.2016.05.089

4. Laura L. Tupper, David S. Matteson, C. Lindsay Anderson (2016) Band Depth Clustering for Nonstationary Time Series and Wind Speed Behavior. Submitted to Technometrics, Preprint available on arXiv

5. Cardell, J. B., & Anderson, C. L. (2015). Targeting existing power plants: EPA emission reduction with wind and demand response. *Energy Policy*, *80*, 11–23. doi:10.1016/j.enpol.2015.01.021

6. Cardell, J. B., & Anderson, C. L. (2014). A Flexible Dispatch Margin for Wind Integration. *IEEE Transactions on Power Systems*, 1–10. doi:10.1109/TPWRS.2014.2337662

7. C. L. Anderson, C. L., Burke, N., Davison, M. (2014). Optimal Management of Wind Energy with Storage: Structural Implications for Policy and Market Design. *Journal of Energy Engineering*, B4014002. doi:10.1061/(ASCE)EY.1943-7897.0000177

8. Anderson, C. L., & Cardell, J. B. (2014). A Decision Framework for Optimal Pairing of Wind and Demand Response Resources. *Systems Journal, IEEE*, (99), 1–8. doi:10.1109/JSYST.2014.2326898

9. Murage, M. W., & Anderson, C. L. (2013). Contribution of pumped hydro storage to integration of wind power in Kenya: An optimal control approach. Renewable Energy, 63, 698–707. doi:10.1016/j.renene.2013.10.026

10. Murillo-Sanchez, C. E., Zimmerman, R. D., Anderson, C. L., & Thomas, R. J. (2013). A stochastic, contingency-based security-constrained optimal power flow for the procurement of energy and distributed reserve. Decision Support Systems, 56, 1–12. doi:10.1016/j.dss.2013.04.006

11. C. Murillo-Sanchez, R. Zimmerman, C.L. Anderson, & R.J. Thomas (2013). Secure Planning and Operations of Systems with Stochastic Sources, Energy Storage and Active Demand, 1–9. IEEE Transactions on Smart Grid. 4(4) 2220:2229. doi: 10.1109/TSG.2013.2281001

12. X. Liu, D.M. O'Carroll, et al. (2009) "Mobility of Multiwalled Carbon Nanotubes in Porous Media", *Environ. Sci. Technol.*, 2009, 43 (21), pp 8153–8158.

13. L. Anderson and M. Davison (2009). The Application of Cash-Flow-at-Risk to Risk Management in a Deregulated Electricity Market. Invited Paper. Special Issue of Human and Ecological Risk Assessment. 15(2): 253-269.

14. L. Anderson & M. Davison. (2008) A Hybrid System-Econometric Model for Electricity Spot Prices: Considering Spike Sensitivity to Forced Outage Distributions. IEEE Transactions on Power Systems. 23(3):927-937

15. L. Anderson and M. Davison. (2005) An Aggregate Weibull Method for Modelling Short-term Generating Capacity. IEEE Transactions on Power Systems. 20(4):1783-1789.

16. M. Davison, L. Anderson, et al. (2002) Development of A Hybrid Model for Electricity Spot Prices. IEEE Transactions on Power Systems. 17(2):257-264.

Peer-Reviewed Papers in Conference Proceedings

1. M. Murage, M. G. Martínez & C. L. Anderson. (2016) A Stochastic Approach to the Optimal Management of a Kenyan Wind Farm Coupled With Storage. IEEE Power Africa Conference, July 2016 Livingstone, Zambia.

2. J. Liu, M.G. Martínez, & C. L. Anderson. (2016) Quantifying The Impact Of Microgrid Location And Behavior On Transmission Network Congestion. Accepted: 2016 *Winter Simulation Conference*

3. Liu, J., Martínez, M.G., Li, B., Mathieu, J. & Anderson, C.L. (2016) A Comparison of Robust and Probabilistic Reliability for Systems with Renewables and Responsive Demand. The 49th Hawaii International Conference on System Sciences. (8 pages)

4. Cardell, J.B., and Anderson, C.L. Flexible Wind Dispatch, System Reliability and EPA's Clean Power Plan. The 49 (2016) Proceedings of the Hawaii International Conference on System Sciences. (10 pages) http://dx.doi.org/10.1109/HICSS.2016.301

5. Martínez, M.G., Liu, J., Li, B., Mathieu, J. & Anderson, C.L. (2016) Enabling renewable resource integration: The balance between robustness and flexibility. Proceedings of the 53rd Annual Allerton Conference on Communications, Computing and Control. (7 pages).

6. Martínez, M. G., & Anderson C. L. (2015). A Risk-averse Optimization Model for Unit Commitment Problems, Proceedings of the 48th Hawaii International Conference on System Sciences (9 pages) http://dx.doi.org/10.1109/HICSS.2015.31

7. Martínez, M. G. & Anderson, C. L. (2014) Toward a Scalable Chance-Constrained formulation for unit commitment to manage high penetration of variable generation. Proceedings of the 52nd Annual Allerton Conference on Communications, Computing and Control. (8 pages).

8. Murage, M., Cardell, J. B., Lukuyu, J., & Anderson, C. L. (2014). The Impact of Variable Market Price on Optimal Control of Wind-Hydro Storage System in Kenya (pp. 2417–2425). Presented at the System Sciences (HICSS), 2014 47th Hawaii International Conference on. doi:10.1109/HICSS.2014.303

9. C. L. Anderson and J. Cardell (2013) "Wind Power Uncertainty and Power System Performance," *Engineering* Special Issue on Integration of Renewables. pp. 41-51. doi: 10.4236/eng.2013.510A007.

10. C. L. Anderson and J. B. Cardell (2013) The Influence of Demand Resource Response Time in Balancing Wind and Load. Proceedings of the 46th Hawaii International Conference on System Sciences (HICSS).

11. Lamadrid, A. J., Mount, T., Zimmerman, R., Murillo-Sanchez, C. E., & Anderson, C. L. (2012). Alternate mechanisms for integrating renewable sources of energy into electricity markets. *IEEE Power and Energy Society General Meeting*. June 2012, San Diego CA

12. M. Roytman, U.V. Shanbag, J.B. Cardell, L. Anderson (2012). Packaging Energy and Reserves Bids through Risk Penalties for Enhanced Reliability in Co-optimized Markets. Proceedings of the 45th Hawaii International Conference on System Sciences (HICSS).

13. J.B. Cardell, L. Anderson (2012). The Impact of Wind Energy on Generator Dispatch Profiles and Carbon Dioxide Production. Proceedings of the 45th Hawaii International Conference on System Sciences (HICSS).

14. J.B. Cardell, C. L. Anderson, (2010) Analysis of the System Costs of Wind Variability Through Monte Carlo Simulation. Proceedings of the 43rd Hawaii International Conference on System Sciences (HICSS).

15. J.B Cardell and C. L. Anderson, (2009) "Estimating the System Costs of Wind Power Forecast Uncertainty", IEEE, Proceedings of the Transmission and Distribution Society General Meeting, 2009. pp. 1-4.

16. L. Anderson and J.B. Cardell (2009). Analysis of Wind Penetration and Network Reliability Through Monte Carlo Simulation. Proceedings of the Winter Simulation Conference 2009.

17. L. Anderson and J. B. Cardell (2008). Reducing Wind Power Variability in Day Ahead Electricity Markets. Proceedings of the 41st Annual Hawaii International Conference on System Sciences (CD-ROM), Computer Society Press, (7 pages).

Recent Scientific Reports

T.D. Mount, C. L. Anderson, R. Zimmerman, J.B. Cardell. (2012) Coupling Wind Generation with Controllable Load and Storage: A Time-Series Application of the SuperOPF: Final Project Report. PSERC Project M-22, PSERC Publication 12-28. November 2012.

Jewell, W. T., Twomey, J., Overcash, M., Cardell, J., & Anderson, C. L. (2012). *Future Grid: The Environment* (Report No. 12-04) (pp. 1–43). Power Systems Engineering Research Center.

Recent Presentations

Anderson C. L. (2015) An Empirical Analysis of the Efficacy of EPA's Clean Power Plan for Emission Reduction in the Power Sector. City and Regional Planning Seminar Series. December 2015

Anderson, C. L. (2015) Integrating Uncertain Renewables in Power Systems: Leveraging Flexibility in Operational Models. Scientific Computing and Numerics (SCAN) Seminar Series. Jointly organized by the Department of Mathematics and the Department of Computer Science, Cornell University. October 2015.

Anderson C. L. (2015) Targeting Existing Power Plants: EPA Emission Reduction with Wind and Demand Response. Energy Seminar, Department of Chemical and Biomolecular Engineering, Cornell University, March 2015.

Martínez, M.G., and Anderson, C. L. (2015) A Chance Constrained Model for Unit Commitment under Uncertainty. Hawaii International Conference on System Sciences. January 6, 2015. Kauai, HI.

L. Cheng, C.L. Anderson (2014) Financial Risk Management of a Lignocellulosic Biorefinery: A Stochastic Programming Approach. INFORMS Annual Meeting, San Francisco, CA. November 11, 2014

M.G. Martínez, C. L. Anderson (2014) Approximate Formulations for Chance Constrained Problems. INFORMS Annual Meeting, San Francisco, CA. November 11, 2014

M. Murage, M.G. Martínez, C. L. Anderson (2014) Two-Stage Stochastic Model for Optimal Operation of Combined Wind-Pumped Storage System in Kenya. INFORMS Annual Meeting, San Francisco, CA. November 12, 2014

Anderson C. L. (2014). Optimization and Simulation with Applications to Power Systems. Cornell University Field of Electrical and Computer Engineering Graduate Field, Invited Presentation. Cornell University, Ithaca NY. October 2014

Martinez, G. & Anderson, C. L. (2014) Toward a Scalable Chance-Constrained formulation for unit commitment to manage high penetration of variable generation. The 52nd Annual Allerton Conference on Communications, Computing and Control. Champaign, Illinois. *Invited Presentation.* September 2014

Martinez, G., Tupper, L. & Anderson, C. L. (2014) Development of Advanced Stochastic Unit Commitment Formulation for Management of Uncertainty. CERTS-DOE Reliability and Markets Annual Review, Cornell University. August 2014

M.G. Martinez, M. Murage and C. L. Anderson, (2014) A Two-Stage Stochastic Model for Optimal Wind Power Commitment. IIE Annual Conference. Montreal, Canada. May 31-June 3rd 2014

L. Cheng, C. L. Anderson (2014) A Two-stage Stochastic Optimization Framework of Lignocelluosic Biorefinery. Presented at joint ASABE-CSBE Conference. Montreal Canada. July 12-15, 2014.

C. L. Anderson (2013) Renewable Energy Integration: Impacts and Strategies. Invited Presentation, Arizona State University Power Systems Graduate Seminar. October 2013. Tempe, Arizona.

M.W. Murage & C. L. Anderson (2013) Analysis of the Combined Use of Pumped Hydro Storage with a Kenyan Wind Farm. INFORMS Annual Meeting, Minneapolis MN. October 2013.

C. L. Anderson (2013) Investigation of Advanced Stochastic Unit Commitment Solution for Optimal Management of Uncertainty. CERTS-DOE Reliability and Markets Review. Cornell University. August 2013

L. P. Walker & C. L. Anderson (2013) Ruminations on Renewable Energy. Cornell Now! Event, San Francisco CA. March 2013

C. L. Anderson (2012) Revisiting the SABBIC Vision: How do we Begin to Optimize Sustainable Biobased Industries. Invited Presentation, The Science and Engineering Challenges to the Development of Sustainable Biobased Industries Seminar Series. October 2012.

*K. Kang, U. V. Shanbhag, J.B. Cardell, C.L. Anderson (2012) Packaging Energy and Reserves Bids through Risk Penalties for Enhanced Reliability in Co-optimized Markets. INFORMS Annual Meeting, Phoenix AZ. October 2012.

*M. W. Murage, C. L. Anderson (2012) Optimal Integration Of Wind Power With Pumped Hydro Storage: Case Study Of Kenya. INFORMS Annual Meeting, Phoenix AZ. October 2012.

C. L. Anderson (2012) Wind Power Integration: Exploring Impacts and Alternatives. Invited Speaker: CEE 6020, Environmental Engineering Seminar. Cornell University, September 2012.

R. Zimmerman, C.Murillo-Sánchez, C. L. Anderson, R.J. Thomas, A. Gupta, D. Muñoz-Álvarez (2012). Tools for Multi-period Stochastic Optimization with Evolving Information. CERTS-DOE Reliability and Markets Review. Cornell University, August 2012

*C.L. Anderson, H. Atiyeh, S. Capreda, D. Keshwani (2012) Systems Methodologies for a Sustainable Bio-Based Economy. The Science and Engineering for a Biobased Industry and Economy Annual Symposium. Washington DC, August 2012

J.B. Cardell, *C. L. Anderson (2012) Managing Wind Variability through a Combination of Self-Reserves and Responsive Demand. Invited Presentation, Lawrence Berkeley National Laboratory, September 2012

L. Anderson & J.B. Cardell (2012) Improving Wind Integration Outcomes with Responsive Demand. Invited Presentation UC Berkeley-Lawrence Berkeley National Lab Demand Response Integration Group. Berkeley CA, April 2012

*L. Anderson & J. B. Cardell (2011) Optimal Balancing of Wind Resources with Responsive Demand on a Network. INFORMS Annual Meeting, Charlotte, NC. November 2011

M. B. Eisenberg, L. P. Walker, C. L. Anderson, (2011) Assessing The Impact Of Uncertainty On Ethanol Production Outcomes. Poster Presentation: The Science and Engineering for a Biobased Industry and Economy Annual Symposium. August 2011. Stillwater, Oklahoma.

*L. Anderson & R. Zimmerman. Wind Output Forecasts and Scenario Analysis for Stochastic Multiperiod Optimum Power Flow. Power Systems Engineering Research Center, Webinar. November 2011.

*M. Davison, L. Anderson & N. Kirby. Energy Storage: A problem at the intersection of Finance and Optimization. 3C Conference, The Fields Institute for Mathematical Sciences, Toronto Canada. October 2011.

[*]L. Anderson. The Systems Approach: A Wind Energy Example. The Northeast Bioenergy and BioProducts Education Program. June 2011.

[*]J. Cardell & C. L. Anderson. Power System Performance with 30% Wind Penetration. Seventh Annual Carnegie Mellon Conference on the Electricity Industry: Emerging Phenomena in Changing Electric Energy Systems. March 2011.

Courses taught at Cornell University

- BEE 6940: Applied Optimization in Engineering, Energy and the Environment (Spring 2015)
- BEE1510: Introduction to Computer Programming (Fall 2007-2015)
- BEE 4880/6880: Modelling and Simulation for Renewable Energy Systems (Fall 2010, as BEE 6940, Spring 2012-2014)
- CHEME 6675: Life Cycle Assessment (Spring 2014)

CHEME 6672: Electric Power Systems (Fall2014)
BEE 6940: Applied Optimization for Engineering, Energy and Environment (Spring 2015)

Courses Taught at Western University:

- Natural Disasters: Mitigation, Modelling and Assessment (Winter 2004, Winter 2005)
- Engineering Statics (Fall 2005)
- Civil Engineering Systems (Winter 2005)
- Applied Mathematics for Engineers (1999/2000, Full year course).
- Calculus I and II (1997/98, 1998/99, Full year course).

[*] Denotes Invited Presentations

Grants Awarded

- CAREER: Advanced Methods for Optimal Integration of Responsive Demand and Variable Generation in Power Systems and Markets. The National Science Foundation. March 2015-2020. Investigator: C.L. Anderson. ($500k)
- "Benchmarking and integrating chance-constrained stochastic unit commitment solution for optimal management of uncertainty" Department of Energy, Consortium for Electric Reliability Transmission Systems April 2014-March 2015. Investigator: C. L. Anderson ($90k)
- "Development of effective and scalable stochastic unit commitment solution for optimal management of uncertainty" Department of Energy, Consortium for Electric Reliability Transmission Systems April 2013-March 2014. Investigator: C. L. Anderson ($90k)
- "The Science and Engineering for a Biobased Industry and Economy" Multistate Research Grant October 2013-September 2017, 16k/annum
- "Investigation of Advanced Stochastic Unit Commitment Solution for Optimal Management of Uncertainty" Department of Energy, Consortium for Electric Reliability Transmission Systems April 2013-March 2014. Investigator: C. L. Anderson ($75k)
- "A Systems Approach to Assessing the Impact of Uncertainty on Bioenergy Production Outcomes." Multistate Research Grant October 2009- September 2012, $18k/annum. Investigators: C. L. Anderson (BEE-Cornell), L. P. Walker (BEE-Cornell)
- "Multidimensional Market Design Project: Development and Testing of New Tools" US Department of Energy, Consortium for Electric Reliability Transmission Systems (2011: $260k) Investigators: C. L. Anderson (BEE - Cornell), C. Murillio-Sanchez (ECE - Cornell), R.J. Thomas (ECE-Cornell), R. Zimmerman (ECE – Cornell),
- "Market & Reliability Issues for Renewable Energy Sources" US Department of Energy, Consortium for Electric Reliability Transmission Systems (2010: $300k) Investigators C.L. Anderson (BEE-Cornell), J. Cardell (Smith), T. Mount (AEM-Cornell), R. J. Thomas (ECE-Cornell), S. Oren (UC-Berkeley), R. Zimmerman (ECE- Cornell)
- "Plug-in Hybrid Electric Vehicles as Distributed Energy Systems: Linking the Power sector, the Transportation sector and the Environment". Cornell Center for a Sustainable Future (CCSF), March 2009 – February 2010 (Co-PI)
- Decision Analysis and Risk Management in Infrastructure Systems. National Science and Engineering Research Council (NSERC) Discovery Grant (Industrial Engineering Section), 2004-2006

Reviewing activities:

Journal Paper Reviewer for

- IEEE Transactions on Industrial Informatics
- IEEE Transactions on Power Systems
- IEEE Transactions on Sustainable Energy
- IEEE Transactions in Smart Grid
- Operations Research
- Wind Energy
- Interfaces

- Journal of Industrial and Management Optimization
- Hawaii International Conference on System Sciences
- Electric Power Systems Research
- Journal of Mathematics in Management
- Canadian Applied Math Quarterly

Proposal and Grant Reviewer for

- Ontario Centre for Energy Research,
- Power Systems Engineering Research Center.
- Biomass Research and Development Initiative (BRDI) USDA. Post-Award Site Reviewer (Dec 2011, Dec 2012)
- National Science Foundation
- Natural Science and Engineering Research Council (NSERC), Canada. Industrial Research Chair Program, On-Site Reviewer (January 2016)

Affiliations & Memberships

Canadian Operational Research Society, Member (2000-2010)
Institute for Electrical and Electronics Engineers, Member (2002-current)
Institute for Operations Research and Management Sciences (INFORMS),
Energy and Natural Resources Section (2002-current),
Optimization Section (2012-current)
Cornell Center for Sustainable Future (CCSF), Fellow & Faculty Advisory Board Member

Collaborators and Affiliations

- Judith Cardell, Smith College
- David Matteson, Cornell University
- Johanna Mathieu, University of Michigan
- Tim Mount, Cornell University
- Carlos Murillio-Sanchez, Universidad Nacional de Colombia
- Angela Cadena, Universidad de los Andes, Columbia
- Uday Shanbhag, Penn State University
- Jefferson Tester, Cornell University
- Robert J. Thomas, Cornell University
- Larry Walker, Cornell University
- Max Zhang, Cornell University
- Ray Zimmerman, Cornell University
- Ph.D. major advisor: Matt Davison, Western University
- M.Sc. major advisor: Lambert Otten, University of Guelph

Advising

Current Ph.D. Students

- Lingfeng Cheng (August 2012-current, Major Field: CBE, Chair: J. Tester[†])
- Amandeep Gupta (May 2012 – current, Major Field: BEE, Chair: C.L. Anderson)
- Jialin Liu (May 2014 – current, Major Field: ECE, Chair: C. L. Anderson)
- Madhur Srivastava (May 2014- current, Major Field: BME, Chair: Jack Freed)
- Kenji Doering (Aug 2016 – current), Major Field: CBE, Co-chairs: C. L. Anderson and S. Steinschneider)

Students Graduated:

- Maureen Murage, Ph.D. 2016
  - A Quantitative Assessment Of Wind Power In Kenya: Assessing Impact And Strategies
- Laura Lindley Tupper, PhD. 2016 (Major Field: Statistics, Chair: David Matteson)
  - Topics in Classification and Clustering of High-Dimensional Data
- Noah Maze, M.Eng, 2014
  - "*Developing Wind Turbine Modules for Gridlab-D*"
- Brandon Bass, M.Eng. 2013
  - Project: "*Production Cost Model For Long-Term Power Price Correlation Forecasting"*
- Natasha (Kirby) Burke, Ph.D. 2012 (Western University)
  - Thesis: "*A Real Options Evaluation of Energy Projects*"
- Khadeejah Sani, M. Eng 2012
  - Project: *"Evaluating the Impact of Energy Savings Technologies in The Statler Hotel"*
- Mariel Eisenberg, M.Eng. 2011
  - Project: *"Assessing the Impact of Uncertainty on Biofuel Production Outcomes"*
- Rachel Dunn, Ph.D. 2011 (minor committee member)
  - Thesis: "*Perspectives, Problems, And Pesticides: The Discrepancies Between Institutional And Local Environmental Conservation Perspectives In Northern Thailand And The Implications For Natural Resource Management Model Development"*
- Teja Kanuparthy, M.Eng. 2010 (co-advised with N. Scott)
  - Project: "*Feasibility of Upgrades to the Ithaca Area Wastewater Treatment Facility to Increase its Biogas Output"*
- Lin Li, M. S. 2006 (Western University)
  - Thesis: *"Reservoir Inflow Forecasting by Artificial Neural Networks"*

Postdoctoral Associates:

[†] Prof. J. Tester is Committee Chair for administrative purposes, as a member of CBE graduate field.

- *Maria Gabriela Martínez September 2014-August 2015*
- *Luckny Zephyr, August 2015-current*

Professional Development Workshops:

- Academic Search Training for Faculty (CU-Advance, September 23, 2013)
- Flipping the Classroom workshop (January 15-16, 2015)

Cornell University Service:

Alumni Engagement:

- Invited Speaker & Panelist: "Talks in 10: Engagement, Sustainability and Global Cornell", combined Trustee-Council Annual Meeting and Homecoming Event. Bailey Hall, Cornell University, October 2014
- Invited Speaker, "Cornell Now 2015 All Alumni Event". San Francisco, California. March 12, 2013

Department and University Service:

- House Fellow, Hans Bethe House (09/15-current)
- Advisory Board Member, Cornell University Consortium for the Integration of Research, Teaching and Learning (CU-CIRTL) (current)
- Faculty Advisory Board, Atkinson Center for a Sustainable Future (09/15-current)
- Environmental Engineering Program Committee (09/15-current)
- Member, Bioinstrumentation and Sensors Faculty Search Committee (2015/16-current)
- Biological and Environmental Engineering Department Representative, Faculty Senate (2010-2015)
- Integrated Water Resources and Hydrologic Systems Engineering Faculty Search Committee (2013/14)
- Undergraduate Advisor for ~ 15 students annually.
- Faculty Advisor to Cornell Running Club (2013/14, 2014/15)