GEORGE BASILE, PHD

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cell: 415 308 2512

EDUCATION

Ph. D. University of California, Berkeley — Biophysics
B. S. University of California, Irvine — Physics, with honors

CURRENT POSITIONS

School of Sustainability, Arizona State University, Tempe, AZ

Professor

Research, application and teaching focus on strategic sustainability, sustainability and innovation, sustainable enterprise/business and resource intelligence; co-lead for development of ASU-wide professional Masters degree in sustainability and leadership, international degree program in sustainability and professional sustainability certificate program; member university-wide meta-planning in renewable energy research and education committee; affiliate, public health law and policy program; affiliate and advisor, North American Center for Trans-border Studies; Developer of sustainability, enterprise and innovation education courses and new SOS curriculum, including integration across other disciplines such as engineering.

Global Institute of Sustainability, Arizona State University, Tempe, AZ

Senior Sustainability Scientist

Co-led or leadership-level support for ~\$70 million in successful research efforts, including three NSF integrative Centers in sustainability, social sciences, engineering and life sciences and novel applied sustainability solutions effort via Walton Sustainable Solutions Initiatives.

The Global KAITEKI Center, Arizona State University, Tempe, AZ

Associate Director

Co-lead the strategic development, projects and growth of a new global discovery and applied-solutions center aimed at sustainable social and environmental success and human wellness.

School of Public Affairs, Arizona State University, Phoenix, AZ

Affiliate Professor

Barrett Honors College, ASU

Honors Faculty

National Environmental Education Foundation

Director

eEcosphere Inc., San Francisco, CA

Director, CSO

TEACHING AND FACULTY EXPERIENCE

School of Engineering, Blekinge University of Technology, Karlskrona, SE

Swedish Knowledge Foundation Distinguished International Guest Professor of Sustainability-Driven Innovation

2011-present

2010-present

2019-present

2011-present

LOII present

2012-present

2015-present

2012-present

2013-2015

Awarded international visiting professorship that bridges unique academic and applied knowledge and experience between Sweden and US. Playing leadership role in developing academic curriculum and applied "solutions-based" research projects working with industry to develop new sustainable solutions integrating product, service and sustainability. Integrated into larger +10 university applied research consortium.

School of Sustainability, Arizona State University, Tempe, AZ

2008-2010

Associate Professor

Multiple sustainability undergraduate, Masters and PhD advisees, curriculum committee, professional Masters leadership, new courses developed and delivered in Sustainability & Enterprise (graduate and undergraduate), co-development of international Masters curricula with UNAM, Mexico, member of SOS/GIOS Center Director leadership team.

The Decision Theater, Arizona State University, Tempe, AZ

2008-2010

Executive Director

Unique research and application center with focus on better decision making for a sustainable future. Led vision setting, strategic planning, project development, faculty engagement, operational oversight and external partnership development. Developed new application areas in Resource Intelligence, Preparedness, and Sustainable Urban Development. Development of novel IT platform for systems-based decision support (USF). Developed projects and collaborations with wide array of businesses. Includes multi-million dollar joint commercial/public project in solar energy deployment and economic development in Arizona and international efforts in water sustainability and Low-E development in Latin America with the Inter-American Bank, Femsa Foundation and Universidad Tec de Monterrey.

MBA Sustainable Enterprise, Dominican University of California

2006-2008

Faculty. Developed and delivered new course in Ecological Economics, Sustainability & Innovation and mentored thesis work. Co-founded Center for Sustainability at Dominican University. International Advisor to BTH Masters Program for Leadership toward Sustainability.

Masters Program for Leadership toward Sustainability Blekinge University of Technology, Sweden

2006-2008

International Advisor. Developed novel curricula and co-authored textbook for the first international Masters Degree program in Leadership & Sustainability.

School of Public Health and Energy & Resources Group, Berkeley, CA University of California at Berkeley,

1998-2000

Specialist, Health Effects of Modern Technology. Created study discipline of health effects and sustainability aspects of emerging technologies with an emphasis on biotechnology.

Stanford University, Department of Biological Sciences, Stanford, CA

1994-1995

Faculty and Director, Core Biology Laboratory. Managed all facets, from executive oversight to curriculum development, instructor development; ~40 teaching assistants and ~ 400 students.

University of California, Berkeley

1986-1990

TA and Graduate Instructor. Supported courses and was selected to lead both non-major/required and major/core courses as a winner of the outstanding graduate instructor award.

RELATED AND BUSINESS EXPERIENCE

Thrive Unlimited, San Francisco, CA

2006-2009

President and Co-Founder. International sustainability consultancy serving Fortune 500 clients and co-founded Clean Technology & Green Products practice at Bite Communications International.

The Natural Step International, San Francisco, CA

1999-2005

Chief Scientist and Executive Vice President. Senior management for both the U.S. and global organization. Co-developed strategic sustainability methodology and led multiple research and application efforts. Led pioneering strategic sustainability efforts with Fortune 500 international businesses and start-ups.

Neomorphic Bioinformatics, Inc., Berkeley, CA

1997-1998

Vice President, Business Development & Strategy. Led company strategic development and business development in a new technology company

GMB Associates, Laguna Beach, CA

1996-1998

Principal. Consulted on industrial ecology, biological modeling, and integration of globally business strategies and sustainability

Lawrence Berkeley Laboratory, Berkeley, CA

1993-1994

NIA Fellow, Campisi Group. Researched molecular genetic mechanisms underlying cancer and aging

AWARDS AND HONORS

US Armed Forces Recognition Award, Dublin, CA, 2018

Best paper, Decision Sciences Annual Proceedings, Washington DC, 2017

Swedish Knowledge Foundation International Guest Professor 2013

Blue Planet Prize (the Natural Step, 2000)

Gorbachev's Green Cross Award for Global Leadership (the Natural Step, 1999)

University of California, Toxic Substances Program Fellowship (1998)

National Institute of Aging (NIA) Fellowship (1993)

University of California, Berkeley, NSF Pre-Doctoral Fellow (1987-1989)

University of California, Berkeley, Outstanding Teacher Award (1986)

Sigma Pi Sigma (National Physics Honor Society) (1983)

COMMITTEES, BOARDS, AFFILIATIONS

MSUS Committee (Masters Curriculum Committee), Chair, ASU

SOS Executive Committee, ASU

SOS 10-year Anniversary/Celebration Committee, ASU

Curriculum Committee (Chair), School of Sustainability, ASU

Graduate Committee, School of Sustainability, ASU

Affiliate, Public Health Law and Policy Program, ASU School of Law

University Adv. Council, North American Center for Trans-border Studies (NACTS)

ASU Energy Meta-Planning Committee, University-wide

ASU Sustainable Operations Committee, University-wide

Professional SOS Masters advisory team, ASU

ASU Sustainable Practices Network (SPN) Advisory Committee

Advisory Board, Verdant Power, Inc.

Advisory Board, Sustainable Spaces, LLC

Board, Center for the Development of Social Finance, NGO

Editor, Special Edition, Journal of Cleaner Production, UNEP

Editorial Board, Sustainability: the journal of record

Board (former), EcoTimber, Inc.

Board, National Environmental Education Foundation (NEEF)

Board, eecosphere

EXAMPLE INVITED COLLOQUIA AND LECTURES

Energy Utility Industry Sustainable Supply Chain Association (EUISSCA) National Conference, Scottsdale, AZ, 2017

GreenMBA Faculty Development Workshop, HAU University, Angeles, Philippines, 2017

Sustainability and Future Enterprise, co-Leader, Global Institute of Sustainability Executive Workshop, Amsterdam, June, 2014, 2015, 2016, 2017.

Sustainability as an Innovation and Leadership Platform. Invited workshop, GreenBiz Forum, Phoenix, Feb 2016, 2017.

Defining Success: from information to action. Board Presentation/Workshop, National Environmental Education Foundation, Washington DC, June 2016.

California Academy of Sciences, San Francisco, 2015

National Environmental Education Foundation, Board, Washington DC, 2015

Horizon, PBS News Show, Phoenix, AZ 2013

Inter-American Development Bank Report, The McCain Institute, Washington, DC, 2013

Innovation and Sustainability, Stockholm/Gothenberg, Sweden 2013

Blekinge University of Technology, Karlskrona, Sweden, 2013

City Council of Peoria, Peoria, AZ 2012

University of California, Merced, Merced, CA, 2011

National Alternative Press Assoc., Las Vegas, NV, 2011

National Energy Symposium, Denver, CO, 2011

Sustainable Cities, Peoria, AZ, 2011

Executive Sustainability, Tempe, AZ, 2011

PBS, Horizons, Phoenix, AZ 2010

Greater Phoenix Chamber of Commerce, Phoenix, AZ 2010

AAAS Annual Meeting, Better Decisions for a Sustainable Future, San Diego, CA 2010

NSF, Biological Sciences and Behavioral Sciences Directorates, Washington DC. 2009

International Conference on Decision Support Systems, San Francisco, CA, 2009

International Brewing Chemists Annual International Meeting, Tucson, AZ, 2009

ASU Alumni Association, Phoenix, 2009

Cleantech Scandinavia, Gothenburg, Sweden, 2008

Green Summit, Phoenix, AZ, 2008

Sustainable Packaging Consortium, ASU, Tempe, 2008

Green Corp, London, UK, 2008

California Clean Tech Open, Palo Alto, CA, 2007

Corporate Council, Los Angeles, CA, 2007

Presidio School of Management, San Francisco, CA, 2006.

UCB Summer Engineering Institute, Berkeley, CA, 2005, 2006.

Ohlone College, World Forum, Fremont, CA, 2005.

Ball State University, Muncie, Indiana, 2005.

Redlands Center for Business Ethics, Redlands University, Redlands, CA, 2004.

Anderson School of Business, UCLA, Los Angeles, CA, 2003.

Mainstream Media, National Public Radio, 2003.

US National Research Council, Washington, D. C. 2002.

Strategic Sustainable Development, ESE Workshop, Univ. of Colorado, Boulder, CO. 2001.

Industrial Ecology and Emerging Technologies, Forum for the Future, Stanford, CA, 2000.

Frameworks for Sustainability, Industrial Leadership Council, NRDC, Washington, DC. 1999.

Sustainability and Biotechnology, Transformative Technologies Forum, San Francisco. 1998.

EXAMPLE CURRICULA DEVELOPED & COURSES TAUGHT/DEVELOPED

Curricula:

GreenMBA, Philippines, ASEAN International Region, HAU

Undergraduate curriculum, School of Sustainability, ASU

International Masters in Sustainability and Leadership (MSLS), BTH, SE

Masters in Sustainable Solutions (MSUS), ASU

Academic Masters in Sustainability, ASU

Executive Masters Sustainability for Leadership (EMSL, hybrid), ASU

Masters Sustainability for Leadership (MSL, online), ASU

US Armed Forces Sustainability Degree Certificate (online), ASU

Courses:

Transformational Sustainability Entrepreneurship course and lab

SOS MSUS Capstone Course Series

Undergraduate Engineering Capstone & Sustainable Design

Strategic Sustainability I, II and III (executive/professional)

Senior and Graduate Applied Solutions-Development Workshops

Sustainability & Enterprise, undergraduate/graduate/major

Sustainability & Innovation, graduate/major

Ecological Economics, graduate/major

Small Business Finance & Ecological Economics, graduate

Strategic Sustainability & Leadership, graduate/major

Biology 44A&B, undergraduate/major/large venue/plus lab

Biophysics 144, undergraduate/upper division major/principles of biophysics/plus lab

Biophysics 44, undergraduate/non-major/science survey

Physics 7, undergraduate/lower division/physics for majors and engineers

Evolution of Life, undergraduate/non-major

Professional courses and seminars sustainability/management/strat. (numerous formats and venues)

EXAMPLE RESEARCH GRANTS & PROJECT PROPOSALS AWARDED

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See: https://isearch.asu.edu/profile/1283732	
The Global Kaiteki Center, (MCHC)	\$3.5Mil
TRANSFORM, International Sust. Businesses,	\$7.5 Mil
Climate Rsl Urbn Campuses + Cmmts (CRUX); (Kresge Fndt.)	\$333K
Sust. & Engnr. Innov. Undergrad. Curric. (Anderson Fndt.)	\$50K
Intrntl. Guest Prof. Sustainability & Innovation (SKF)	\$400K
Center for Resource Intelligence (City of Phoenix)	\$2 Mil
Walton Sustainably Solutions Initiatives (Walton Family Fund)**	\$27.5 Mil
Water Decision Support & Sustainability Mexico II (IDB)	\$1.5 Mil
Water Decision Support & Sustainability Mexico I (IDB and FEMSA	A) \$400K
AzSMART (CSF, energy sust.) (AZ Sci Foundation/cmrcl match)***	\$3.9 Mill
Decision Center for a Desert CityII (NSF res. center)**	\$7 Mill
CAPIter (long term urban ecology), (NSF res. center)**	\$10 Mill
Water Sustainability Mexico (Femsa Fundacion/IADB)	\$400K
Managing biodiversity under climate change (NSF)	\$300K
Sust. Enterprise Symposium (Waste Management, Inc.)	\$100K
DCDC/AWI Climate Uncertainty Workshops (AWI)	\$40K
DCDC Water/energy nexus GIS (NSF)	\$40K
City of Avondale planning (Avondale)	\$40K
H1N1 Flu TTX & Risk Communications (Ariz Dept Hlth Srvs)*	\$195K
Anthrax POD (ADHS)*	\$75K
Legal Triage Preparedness (RobertWoodJohnson) ****	\$150K
Application of Sust. Frameworks (Surdna Foundation) #	\$750K
Sustainability Institution Bldg (Kwyjibo Charitable Fndtn.) #	\$450K
Sustainability Institution Bldg (Marin Cmmty Fndtn) #	\$600K
Sustainability & Enterprise (Rockefeller Bros. Fund) #	\$250K
Sustainability & Enterprise (Garfield Foundations) #	\$200K
Sust. and Prdct Design (Natl. Endowment Arts) #	\$150K
* under my purview as ED, ASU Decision Theater	

^{**} senior personnel

GRADUATE STUDENTS (ASU)

A Baty, M Bhan, R Buch, E Freeman, B Furrow, A Krause, L Rosenberg, S Rubin, C Tetreault, S Tilak, G Ugarte, M Woods, L Withycombe, J Fernandi, B Denker, D Culotta, SA Augustin, L Sierra, J. Culver, D. Faught, T. Foucrier, A. Lane, M. Moreau, V. Patterson, A. Rogers, R. C. Sawyer, J. Davis-Welty, N. Francis

PUBLICATIONS

In Prep:

^{***} with ASU WP Carey/Siedman Economic Institute, Dept. Elec. Engineering

^{****} with ASU School of Law

[#] with the Natural Step US

Basile, G., Behravesh, SA., Connel, T.I (2019) "S-ROI Leading Practices: Sustainable success using S-ROI." Manuscript in prep.

Basile, G. and Augustine, SA.. (2019). "Requirements for a professional degree in sustainability & leadership: foundations for success in an emerging and evolving arena". Manuscript.

Basile, G. (2019) Remembering the Future: memory development as a platform to enhance imagined positive futures and support sustainability transitions. Manuscript

Select publications:

2017. Augustin-Behravesh, Shirley-Ann, Angelo Kinicki, George Basile, and Kevin Dooley. "Uncovering Sustainable Business Practice Bundles" *Decision Sciences Annual Proceedings*, Washington DC, November 2017.

2017. Special Volume: Systematic Leadership towards Sustainability. Eds. G. Basile, Broman, G., Henrik, K-H., Larrson, T., Baumgartner, R., Collins, T., and Huisingh, D. Journal of Cleaner Production. Vol. 140, 1-386. Also at:

http://www.sciencedirect.com/science/journal/09596526/140/part/P1

2017. "An approach to business model innovation and design for strategic sustainable development." With França, C., Broman, G., Robèrt, Trygg, Llournal of Cleaner Production. 140, 155-166. Also at: http://www.sciencedirect.com/science/article/pii/S0959652616308010

2016. "Science in support of systematic leadership towards sustainability." With Broman G., Robèrt K-H.., Larsson T., Baumgartner R., Collins T. and Huisingh D. *Journal of Cleaner Production*, 140, 1-9. Also at:

http://www.sciencedirect.com/science/article/pii/S0959652616314263

2014. "How to Create a New Narrative for Sustainability That Will Work: And Why It Matters (Part 2)". With McNall, S. *Sustainability: The Journal of Record*. February 2014, 7(1): 9-20. Access: http://online.liebertpub.com/doi/abs/10.1089/SUS.2014.9822

2014. "Can Millennials and social networking lead us to a sustainable future?" With A. Krause. Access: https://www.greenbiz.com/blog/2014/05/20/can-millennials-and-social-networking-lead-us-sustainable-future

2014. "You Are What You Share: Three Keys to Building Your Authentic Leadership Story". With A. Krause. *Sustainable Brands In Focus*. Access:

http://www.sustainablebrands.com/news_and_views/leadership/george_basile/you_are_what_you_share_three_keys_building_your_authentic_le

George Basile, Ph.D.

- 2013. "Systematic leadership towards sustainability". With Broman G., Robèrt K-H., Larsson T., Baumgartner R., Collins T. and Huisingh D. *Journal of Cleaner Production*, 64.
- 2013. "How to Create a New Narrative for Sustainability That Will Work: And Why It Matters (Part I)". With McNall, S. *Sustainability: The Journal of Record*. 6(6): 297-301. Access: http://online.liebertpub.com/doi/abs/10.1089/SUS.2013.9835
- 2013. "Analyzing the Concept of Planetary Boundaries from a Strategic Sustainability Perspective: How do we avoid tipping the planet" with Robert, KH and Gorman, B. *Ecology and Society* 18 (2): 5. Access: http://www.ecologyandsociety.org/vol18/iss2/art5/
- 2013. "Challenges in Creating Resilient and Sustainable Societies" with Mcnall, S. In Fragile Stabilität Stabil Fragilität. Schriften der Zeppelin Universität 2013, pp 89-116.
- 2013. "Strategic Framework for Sustainable Development" with Broman, G., Henrik, KH., Moore, B. *Berkshire Encyclopedia of Sustainability*, Edts: Ray Anderson, et al. Berkshire Publishing Group, London.
- 2013. "Sustainability as a Design Lens for our Future Food". Basile, G. *Boardroom Journal*. Oct, pp 4-6. Access: https://d3dqsm2futmewz.cloudfront.net/docs/gios/press/2013/virgo-brj-foodsust-1013.pdf
- 2013. "The Sustainability Leadership Opportunity: Are You a 'Can Do' Leader?" with Sarda, B. *Triple Pundit*. Access: https://www.triplepundit.com/2013/10/sustainability-leadership-opportunity-leader/
- 2012. "Trust, Sustainability, and Political Innovation: A New Reality for our Future" with Bernstein, M. and McNall, S. G. *Sustainability, the Journal of Record*, 5(3): 123-126.
- 2011. "Sustainability: What would Steve Jobs do?" Basile, G. Sustainability, the Journal of Record, 4(6): 261-263.
- 2011. "Electricity in Arizona: today and tomorrow," with Mayes, K. Arizona Town Hall Report.
- 2011. "A Systems-based Approach to Sustainable Enterprise: requirements, utility and limits" with Broman, G and Robert, KH. In *The Business of Sustainability*, Vol. 1, eds., McNall, Hershauer and Basile. New York: Praeger, 2011. Pg 3-28.
- 2011. "Being strategic about sustainability: a pragmatic guide". Basile, G. In *The Business of Sustainability*, Vol. 2, eds., McNall, Hershauer and Basile. New York: Praeger. Pg 3-22.
- 2011. The Business of Sustainability. Vol., 1, 2 and 3. Vol. 1: Global Challenges and Opportunities, Vol. 2: The Global Web: Designing, Managing, and Measuring and Vol. 3: The Road to Sustainability: Choices Made and Good Practices. Eds., McNall, Hershauer, Basile. New York: Praeger Press.
- 2011. "What is the worth of a degree in sustainability?" G. Basile. *Sustainability, the Journal of Record*, 4(3): 95-97.

- 2008. "Greenwashing: a perfect storm". With Kristina Skierka, Bite Communications. Industry White Paper, San Francisco.
- 2007. "Ecological Sustainability: the dominant communications issue of the decade". With Burghardt Tenderich, Bite Communications. Industry White Paper, San Francisco.
- 2005. "Fitting together the building blocks for sustainability: a revised model for integrating ecological, social, and financial factors into business decision-making," with Bertolucci, M., Cauley, H., Cowan, M., Fisk, P., Geiser, K., S. Irwin, S., McPherson, A., Waage, S., and Weissman, A. *Journal of Cleaner Production*, 13(12).
- 2004. Strategic leadership towards sustainability, with Karl-Henrik Robert, Goran Broman, Sophie Byggeth, David Cook, Hordur Haraldsson, Lena Johansson, Jamie McDonald, Henrik Ny, Jonas Oldmark and David Waldron. Karlskrona: Psilanders Grafiska, Sweden.
- 2004. *Towards sustainability for designers: a manual for sustainable design*, with Adams, R., Rice, B. and Waage, S. The Natural Step Publications. San Francisco.
- 2004. Sustainability principles for designers: a teaching resource and guide, with McPherson, M., Rice, B., and Waage, S. The Natural Step Publications. San Francisco.
- 2002. "Health science and national security," Letter. Science. 295: 2015.
- 2002. "Strategic Sustainable Development: Selection, Design and Synergies of Applied Tools," with J. Aloisi De Larderel, P. Hawken, L. Jansen, R. Kuehrig, P. Price-Thomas, K. Robert, B. Schmidt-Bleek, M. Suzuki, and M. Wackernagel. *Journal of Cleaner Production*. 10: 197-214.
- 2002. "Utilizing Principles for Sustainability within the GRI," with Price-Thomas, P. and Henrik, K. H. Global Reporting Initiative Working Group Report.
- 2001. "Strategic sustainable development," with Aloisi De Larderel, J., Hawken, P., Jansen, L. J., Kuehrig, R., Price Thomas, P., Robert, K. H., Schmidt-Bleek, B., Suzuki, M. and Wackernagel, M. *UNEP Industry and Environment Review.* 24 (1-2).
- 2000. "Designing with the World in Mind: The Natural Step Model," with J. Rosenblum. Forum for Applied Research and Public Policy. 15(4): 29-35.
- 2000. "Sustainable Resources: Moving from Commodities to Ecosystem Services," with K. Vian. *IFTF Millennial Forecast*. 1(1): 123-142.
- 1996. *Introduction to experimental biology: a student guide*, with Chu, J. W., Edts., Stanford student press, Stanford, CA.
- 1996. *Teaching experimental biology: a teacher training guide*, with Chu, J. W., Edts. Stanford student press, Stanford, CA.

- 1995. "A Biomarker that Identifies Senescent Human Cells in Culture and in Aging Skin *in vivo*," with J. Campisi, G. Dimri, and X. Lee. *Proceedings of National Academy of Science*. 92: 9363-9367.
- 1992. "Nucleotide sequence and transcriptional regulation of the yeast recombinational repair gene RAD51", with M. Aker, and R. K. Mortimer. Mol Cell Biol.; 12(7): 3235–3246

EXAMPLE LAY PUBLICATIONS

- 2007. "Transparency to drive eco-policies," PR Week, Aug. 6.
- 2004. "Looking to our future on a blue-green planet," Making Waves.
- 2002. "It's all about the Beach". Making Waves.
- 2001. "Cheney slights energy conservation". Editorial. San Francisco Chronicle. May 3.
- 2000. "The Sustainability Puzzle I: Putting the Pieces in Place," with J. Rosenblum. *The Natural Step News*. 1 (11): 1-2.
- 2000. "The Sustainability Puzzle II: Where Science Fits." The Natural Step News. 1 (12): 1-2.
- 2000. "The Sustainability Puzzle III: The Need for System Principles." *The Natural Step News*. (1)13: 1.