Proposal Checklist

Interdisciplinary Climate Crisis Research Grant

Submission Deadline: Monday, February 24, 2020, 12:00pm, EST

- ■ Project summary
- ■ Signature page
- ■ Project Description
- ■ Citations
- ■ Statement of Interdisciplinary Collaboration
- ■ Budget
- ■ Budget justification
- ■ 2-page CV/biosketch
- ■ List of current and pending funding
- ■ Convert application materials into a single PDF for submission via the online system
  File name: ICCRG_LastNameOfLeadPI_proposal.pdf

Project Summary

Participating Faculty

1. Lead PI
Name: Jason Montgomery — Department: Architectural Technology
Rank: Assistant Professor — Campus: New York City College of Technology

2 . Additional PI
Name: Jenna Spevack — Department: Communication Design
Rank: Professor — Campus: New York City College of Technology

3. Additional PI
Name: Reginald Blake — Department: Physics
Rank: Professor — Campus: New York City College of Technology

4. Additional PI
Name: Ben Shepard — Department: Human Services
Rank: Professor — Campus: New York City College of Technology

5. Additional PI
Name: Mery Diaz — Department: Human Services
Rank: Associate Professor — Campus: New York City College of Technology

6. Additional PI
Name: Jihun Kim — Department: Architectural Technology
Rank: Assistant Professor — Campus: New York City College of Technology

Project Title:
CITIES IN A CHANGING WORLD: QUESTIONS OF CULTURE, CLIMATE AND DESIGN
A conference on architecture, urbanism, planning, sociology, health, environments, media, infrastructure and economies.

Summary:

City Tech is hosting the AMPS multi and interdisciplinary conference June 16-18, 2021. AMPS (Architecture, Media, Politics and Society) is an international nonprofit research organization.[1] AMPS conferences have been held around the globe since 2014, with conference topics focusing on the Mediated City, Housing, Urban Sustainability, and Healthy Cities. City Tech and AMPS have joined to form this scholarly conference titled *Cities in a Changing World: Questions of Culture, Climate, and Design*, to address the broad challenges cities face in the 21st century, especially due to rapidly changing climate conditions that threaten the livability of many coastal cities around the globe. An interdisciplinary team of faculty from City Tech have formed to develop the conference with the AMPS team, to select a keynote speaker, to coordinate workshops for new grant opportunities, to chair paper sessions, to curate a student exhibition, and to offer a multimedia/ immersive space for enhanced presentations and special installations. The faculty team will continue this effort by guest editing special AMPS journal issues[2] and new books[3] that develop from conference papers.

[1] "About," AMPS, accessed Feb 19, 2020, https://architecturemps.com/about/.
[2] University College London Press publishes AMPS journals.
[3] AMPS has an arrangement with Routledge for book development.

Signature Page

Title of Proposal: **CITIES IN A CHANGING WORLD: QUESTIONS OF CULTURE, CLIMATE AND DESIGN A conference on architecture, urbanism, planning, sociology, health, media, environments, infrastructure and economies.**

Faculty Signatures

Name: Jason Montgomery Signature: _____ Date: 2020 Feb 23

Name: Jenna Spevack Signature: _____ Date: 2020 Feb 23

Name: Reginald Blake Signature: _____ Date: 2020 Feb 23

Name: Ben Shepard Signature: _____ Date: 2020 Feb 23

Name: Mery Diaz Signature: _____ Date: 2020 Feb 23

Name: Jihun Kim Signature: _____ Date: 2020 Feb 23

Signature of Grants Officer

Name: Barbara Burke Signature: Barbara Burke Digitally signed by Barbara Burke DN: cn=Barbara Burke, o=New York City College of Technology (CUNY), ou=Office of Sponsored Programs, email=bburke@citytech.cuny.edu, c=US Date: 2020.02.24 09:51:13 -05'00' Date: 2020 Feb 24

Campus endorsement if requesting salary support (Department Chair or Provost): This is to certify that the applicant from this college is authorized to conduct the study described in this proposal, and the undersigned is satisfied that the scope of the applicant's project will not interfere with his or her professional duties.

Signature: _____ Date: _____

Title: _____ College: _____

Signature: _____ Date: _____

Title: _____ College: _____

Project Description

While cities are the critical habitat for humanity in the 21st century, the coastal location of a large proportion of cities around the world[4] raises the question of the resiliency and livability of these cities.[5] While many conferences are organized within a discipline silo, the AMPS conference has a strong tradition of exploring the built environment through a variety of lenses. Recently published articles in the AMPS periodical and proceedings[6] provide evidence of multiple and interdisciplinary perspectives. Therefore, this conference brings to CUNY and New York City a broad international and interdisciplinary discussion to help deepen our collective understanding of climate impacts on cities and communities around the world and new strategies for addressing these impacts in context. This conference at City Tech will consider the climate crisis effect on global cities in an interdisciplinary context. A call for papers has been drafted and will be finalized and published in April 2020.[7] There will be two rounds of paper abstract submissions in November, 2020 and April 2021. AMPS has in place peer reviewers for the double-blind review. AMPS takes responsibility for conference advertising. Typically, up to 27 countries are represented at AMPS conferences, providing evidence of broad participation. The City Tech conference interdisciplinary team will facilitate broad disciplinary participation by CUNY and regional scholars through dissemination and invitations through our colleges and contacts. With the grant support we can take responsibility to select an internationally prominent keynote speaker such as Michelle Addington[8] or Amy Glasmeier[9] that represents this interdisciplinary approach to the 21st century city. The conference will require the Voorhees theatre for the opening, closing, and keynote presentation. Over the three days of the conference 4 classrooms in the New Academic Complex will be used for the paper presentations. Breakout sessions will offer participants exposure to funding opportunities with coordinators from programs like the NSF Urban Systems and 21st Century Communities programs.[10] The PIs will chair paper sessions during the conference. We will curate a student exhibition with help of a student research assistant. At the invitation of AMPS, we will also form an editorial team that will select and steer continued development of ideas generated at the conference and disseminate them through the AMPS journal, proceedings, and books projects as guest editors. City Tech students and faculty will have their registration fee waived. The $350 registration fee is used by AMPS to cover advertising expenses as well as publication support.

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[4] 570 cities with a population of 800 million are cited by C40 in: "Staying Afloat: the Urban Response to Sea Level Rise, C40, accessed Feb 19, 2020, https://www.c40.org/other/the-future-we-don-t-want-staying-afloat-the-urban-response-to-sea-level-rise. See also: https://www.worldbank.org/en/topic/urbandevelopment/brief/global-platform-for-sustainable-cities

[5] "The world's coastal cities are going under. Here's how some are fighting back," World Economic Forum, accessed Feb 19, 2020, https://www.weforum.org/agenda/2019/01/the-world-s-coastal-cities-are-going-under-here-is-how-some-are-fighting-back/.

[6] See: https://architecturemps.com/back_issues/ and https://architecturemps.com/proceedings/

[7] Draft call for papers: https://architecturemps.com/new-york-2021/

[8] See her bio here: https://soa.utexas.edu/people/michelle-addington

[9] See her bio here: https://dusp.mit.edu/faculty/amy-glasmeier

[10] The NSF has multiple programs under this rubric. See https://www.nsf.gov/ere/ereweb/urbansystems/ Programs include Smart and Connected Communities, Sustainable Urban Systems, Coastlines and People, Long Term Ecological Research – Urban Ecology. The conference team will reach out to program directors to discuss new funding opportunities for 2021 cycle. Another potential agency participant is US HUD through programs like Choice Neighborhoods https://www.hud.gov/program_offices/public_indian_housing/programs/ph/cn

Statement of Interdisciplinary Collaboration

This group of faculty representing a range of disciplines has overlapping interests that fostered previous collaboration. Many of us teach and research directly or indirectly under the rubric of Urban Studies. We have a track record that includes interdisciplinary teaching and collaborative projects including multiple symposia[11]. We pursue in our work the investigation of the built and natural environments in relation to social structures, human welfare, ecological systems, social justice, environmental and urban sustainability, communication and media. This conference provides us an opportunity to expand our interdisciplinary collaboration. We are reviewing topics for joint paper submissions to this conference that focus on the climate crisis in relation to urban sustainability, public space, and social justice. We are interested in the intersection of neighborhood design and geographic space and how issues of environment justice contribute to the political and social inclusion, health and mental health risks. We are exploring curating an immersive video series, thinking about immersive media as a tool for building empathy and communicating the urgency of the climate crisis. The publications generated by the conference will further our interdisciplinary collaboration through our curation and editing of conference papers into more elaborately developed thinking with the international scholars.

[11] Living Along the Brooklyn Waterfront:
https://openlab.citytech.cuny.edu/jmontgomery-portfolio/scholarly-work/publication-production/conference-papers/living-in-brooklyn-housing-along-the-brooklyn-waterfront/
https://bwrc.commons.gc.cuny.edu/2019/04/18/living-in-brooklyn-annual-conference-recap/

Rethinking Jay Street Symposium:
http://benjaminheimshepard.blogspot.com/2014/09/rethinking-jay-street.html
https://openlab.citytech.cuny.edu/jmontgomery-portfolio/scholarly-work/publication-production/panel-discussions/rethinking-jay-street/
http://benjaminheimshepard.blogspot.com/2014/11/reflections-on-rethinking-jay-street.html

Rezoning Downtown Brooklyn Symposium:
https://openlab.citytech.cuny.edu/jmontgomery-portfolio/scholarly-work/publication-production/panel-discussions/re-zoning-downtown-brooklyn/
http://benjaminheimshepard.blogspot.com/2015/04/the-re-zoning-of-downtown-brooklyn-ten.html

Proposed Budget

Category	**Amount**
1. Personnel	
Research Assistant/Associates	$1200.00
Fringe benefits (35% full time, 8% part time)	$96.00
Faculty Summer salary ($10,000 cumulative maximum)	$0.00
Fringe benefits on summer salary (28%)	$0.00
Total Personnel Costs:	$1296.00
2. Other than Personnel Services (OTPS)	
Travel	$1,600.00
Supplies (itemize on separate sheet)	$1,500.00
Miscellaneous (itemize on separate sheet)	$5,500.00
Total OTPS Costs:	$8,600.00
Total Budget:	$9,896.00

Budget Justification

Brief itemized explanation of budget:

1. **Support the selection, honorarium and travel of the keynote speaker that we can select:**

In the miscellaneous category, **$2,000** (professional rate of $250/hour x 8 hours) is budgeted for the honorarium. Of the travel budget, **$700.00** is the budget for the international or national travel of the keynote speaker, while **$900.00** is budgeted for 3 nights hotel expense in New York for the keynote speaker.

2. **Support for four students as Research Assistants that can help with research and preparation for the conference as well as help during the conference with registration and orientation.**

This conference will require assistants to help with registration, orientation, and miscellaneous tasks as well as preparation of the student exhibition. The Research Assistant budget is **$1200,** with $300 allocated as a flat stipend for each student assistant.

3. **Support a student exhibition (printing expenses, supplies, Research Assistants to help coordinate.)**

Student presence and participation at the conference is an important opportunity for their exposure to scholarship as well as networking opportunities with the participants. A professional presented student exhibition will help encourage student participation while also helping showcase City Tech student work to an international audience. **$1200** of the supplies budget is dedicated to the printing and mounting costs for the student exhibition.

4. **Support use of the Igloo for special immersive presentations as part of the conference.**

City Tech has showcased previously immersive video technology in partnership with Igloo Shared VR. For this conference, out of the miscellaneous budget, **$2500** is budgeted for this immersive projection space (https://www.igloovision.com/products/cylinders/9-metre-cylinder) to be available for conference paper presentations, student presentations, and supplementary presentations for breakout sessions or evening events. This technology will help offer media

related scholarship a powerful vehicle for communication and dissemination to the conference attendees. This space, along with the student exhibition, could be installed for at least 1 week to allow other interested parties to visit.

5. Conference Catering

City Tech is responsible to supply a catered breakfast each day of the conference. **$1000** of the miscellaneous budget is to cover this expense.

6. Misc. Conference supplies

City Tech will provide a conference notebook and pen or equivalent for presenters. **$300** of the supplies budget is to cover this expense.

Summary:

4 Research Assistants @ $300.00 flat stipend		$1200.00
Fringe Benefits @ 8%		$96.00
Travel for Keynote Speaker:		
	Flight/Travel	$700.00
	Hotel (3 nights)	$900.00
Supplies		
	Student Exhibition	$1200.00
	Conference Notebooks/Pen	$300.00
Miscellaneous		
	Honorarium for Keynote Speaker	$2000.00
	Igloo	$2500.00
	Catering:	$1000.00

Biographical Information

Name: **Jason Montgomery** Title: Assistant Professor
Department: Architectural Technology College: New York City College of Technology
Date of full-time hire at CUNY: August 2009
Email address: jmontgomery@citytech.cuny.edu Telephone: 718.791.2787

Professional Preparation

University of Notre Dame, South Bend	Architecture	BArch	1992
Prince of Wales's Institute of Architecture, London	Architecture	Grad Diploma	1996
University of Wales, Cardiff	Architecture	MA	1997
New York State Office of the Professions	Architecture	License	2009
National Council of Architectural Registration Boards	Architecture	Certificate	2009

Appointments

2009 – present	Assistant Professor	New York City College of Technology, CUNY
2003 fall	Critic	Yale University
1997 – 1999	Adjunct Professor	University of Notre Dame, Rome Studies Program
1993 spring	Adjunct Professor	Andrews University

Products

(i) Related to the Proposed Project

1. Montgomery, Jason. "LEARNING PLACES: Place-Based Learning in an Interdisciplinary Approach to Undergraduate Research " Book Chapter Proposal, *Interdisciplinary Team Teaching: A Collaborative Study of High-Impact Practices.* editors Reneta Lansiquot, Sean Macdonald. Proposal Submission: May/June 2019. Accepted for Publication: Oct. 2019, in progress.
2. Montgomery, Jason, and Anh Truong Montgomery. Competition Entry. *Big Ideas for Small Lots*, Department of Housing Preservation Development. spring 2019.
3. Brooklyn Waterfront Research Center: Research Fellow, Contributor to Annual Conference as Invited Moderator and Editor of Conference Program: *Living in Brooklyn: Housing along the Brooklyn Waterfront Conference*, City Tech, New York, BWRC, April 12, 2019.
4. Symposium Organizer: Montgomery, Jason, Michael Duddy, Benjamin Shepard, and Eric McClure. *Rezoning Downtown Brooklyn.* Brooklyn Historical Society, Brooklyn. 21 April 2015.
5. Montgomery, Jason, and Philippe Gozlan with Pompei AD. *Urban Master Plan. Redondo Beach Waterfront.* Redondo Beach, California, 2013-2015. (master planning a 150-acre land and water area site for the City, including 450,000 sq. ft. of commercial space and a large waterfront esplanade park.)

(ii) Other Significant Products

1. Major Contributor: E. Macaulay-Lewis, *Bayt Farhi and the Forgotten Sephardic Palaces of Late Ottoman Damascus*, Manar al-Athar Monograph Series, no. 4, American School of Oriental Research & University of Oxford, May 2018.
2. Montgomery, Jason. "Chapter 5 Teaching a Broad Discipline: The Critical Role of Text Based Learning to Building Disciplinary Literacy in Architectural Education", *Teaching College-Level Disciplinary Literacy: Strategies and Practices in STEM and Professional Studies*, edited Juanita But, Palgrave Macmillan/Springer, forthcoming, expected 2020.
3. Montgomery, Jason. *Ecole Superière en Tourisme et Hôtellerie.* New Academic Building, Cap Haitien, Haiti, spring 2018-present.
4. Montgomery, Jason. *The Psychology of Isolation, the Legacy of 1950's Urban Renewal in New York City and the Path to an Integrated, Diverse and Sustainable American City.* National Meeting Dine-Around, American Psychoanalytic Association, Manhattan. Jan 2016.
5. Invited Talk: Montgomery, Jason and Jeffrey Burden. "Analytical Modeling of Historic Buildings and Artifacts" 8 Feb. 2019, CUNY Graduate Center, NY. Invited Lecture/Workshop in the NYC Digital Humanities Series.

Synergistic activities:

- Co-director, LIVING LAB GENERAL EDUCATION SEMINAR, New York City College of Technology, fall 2018 – present. I help train faculty across the college in professional development and integration of general education across all disciplines.
- Research Fellow, BROOKLYN WATERFRONT RESEARCH CENTER, 2018-present. I assistant the director, Richard Hanley, with conference development and research projects.
- Facilitator, BRIDGING THE GAP, COGNITIVE RESEARCH AND INSTRUCTIONAL PRACTICE, New York City College of Technology, fall 2016. I led this faculty seminar focused on professional development.
- Fifth Year Fellow, LIVING LAB GENERAL EDUCATION SEMINAR, spring 2015 - fall 2016. Research on curriculum change to balance discipline specific with general education objectives.
- Third Year Fellow, LIVING LAB GENERAL EDUCATION SEMINAR, spring 2013 - fall 2014. Exploration of Academic Service Learning Project.
- Lead Author, ARCHITECTURE PROGRAM REPORT (APR): INITIAL CANDIDACY (NAAB) fall 2017. Critical document to help secure status for new BARCH degree program at City Tech.
- Montgomery, Jason, and Hart Howerton. Urban Design, Landscape Project. THE SUMMIT, BECHTEL FAMILY NATIONAL SCOUT RESERVE. Mount Hope, West Virginia, 2010 (master plan and conceptual design for 10,600-acre camp for National Boy Scout Jamboree, population 40,000 + 10,000 staff.)

Biographical Information

Name: **Jenna Spevack**
Title: Professor
Department: Communication Design
College: New York City College of Technology
Date of full-time hire at CUNY: 2002
Email address: jspevack@citytech.cuny.edu
Telephone: 718.260.5221

Professional Preparation

State University of New York at Buffalo	Printmaking	BFA	1994
Rhode Island School of Design	Painting/Printmaking	MFA	1996

Appointments

2017-current	Professor, Communication Design	NYC College of Technology, CUNY
2010-2017	Associate Professor, Communication Design	NYC College of Technology, CUNY
2008-2010	Assistant Professor, Emerging Media Tech	NYC College of Technology, CUNY
2002-2008	Assistant Professor, Communication Design	NYC College of Technology, CUNY

Products

(i) Related to the Proposed Project

(Selected Solo Exhibitions and Public Installations)

1. 2016 Treetones Tour, Governors Island, NYC
2. 2014 Birds of Brooklyn: Miami Migration, Pulse Miami / Art Basel Miami
3. 2012 Eight Extraordinary Greens, Mixed Greens, NYC
4. 2012 Seeding the City, Pulse Miami / Art Basel Miami
5. 2010 Birds of Brooklyn, NYC

(Selected Group Exhibitions and Public Installations)

6. 2018 AVIFAUNA: Birds + Habitat, Glyndor Gallery - Wave Hill, Bronx, NYC
7. 2017 SEEP, The Woskob Family Gallery, Penn State University, PA
8. 2017 Being Well: In Search of Utopia, The Old Stone House, Brooklyn, NYC
9. 2017 Wood Works, BLDG 92 - Brooklyn Navy Yard, Brooklyn, NYC

(ii) Other Significant Products

1. CUNY IT Conference 2018, John Jay College of Criminal Justice
   "Opening Education at CUNY with Commons in A Box OpenLab," November 30, 2018
2. CUE Conference 2017, Borough of Manhattan Community College
   "Creative Collaborations: First Year Learning Communities on City Tech's OpenLab" May 2017
3. Lower Manhattan Cultural Council Open Studios on Governors Island, May 28 – 29 & June 25, 2016

4. Teach@CUNY Conference, CUNY Graduate Center, "Open Digital Pedagogy: A Game-Based Workshop with City Tech's OpenLab Team", May 1, 2016
5. Edwards, C., Rosen, J., Smale, M. A., and Spevack, J. (2014). Building a Place for Community: City Tech's OpenLab. Journal of Interactive Technology and Pedagogy.

Synergistic activities:

- Lower Manhattan Cultural Council, Process Space on Governors Island, Residency (2016)
- PSCCUNY, Research Foundation Grant (2016, 2014, 2011, 2007, 2006)
- Pulse Miami Art Fair, Steven's Prize, Artist Grant (2012)
- NYC Council for Cultural Affairs, Artist Grant (2010)
- Curriculum Design:
    - Certificate in Interactive Media Technologies (2008)
    - Bachelors Degree Program in Emerging Media Technologies (2010)
    - Bachelors of Fine Arts in Communication Design (2017)
- Co-Director, OpenLab: City Tech's digital community for teaching and learning (2011-current)
- Co-Director, Design "Learning in the Public Square: An Open Platform for Humanities Education" Digital
- Humanities Implementation Grant, National Endowment for the Humanities (2016-2018)
- Development Lead, OpenLab Integration for "Digital Pathways" Title III HSI-STEM and Articulation
- Grant with BMCC, U.S. Department of Education, (2016-2021)
- WeBWorK Integration Co-Director, "Opening Gateways: Open Digital Pedagogies for Student Success

in STEM "Title V Cooperative Arrangement Grant (BMCC), U.S. Dept. of Education (2015-current)

- Living Lab Steering Committee, "A Living Laboratory" U.S. Department of Education Title V grant (2011-2016)

Biographical Information

Name: **Reginald A. Blake**
Title: Professor
Department: Physics
College: New York City College of Technology
Date of full-time hire at CUNY: 2003
Email address: rblake@citytech.cuny.edu
Telephone:

Professional Preparation

City College of New York	Meteorology	B.S.	1987
City College of New York	Meteorology and Physical Oceanography	M.A.	1990
City University of New York	Geophysics (Hydro-Meteorology)	Ph.D.	1998

Appointments

2019 – Present	Adjunct Professor – Columbia University
2016 – Present	Professor of Physics – New York City College of Technology
2008 – Present	Member of the New York City Panel on Climate Change
2004 – Present	Collaborating Research Scientist – Brookhaven National Laboratory
2010 – 2016	Associate Professor of Physics – New York City College of Technology
2003 – 2010	Assistant Professor of Physics – New York City College of Technology
2001 – 2004	City Research Scientist – NYC Department of Environmental Protection
1999 – 2001	Research Assistant Professor – City College of New York
1998 – 2001	Columbia University: NASA/GISS Post-Doctoral Fellow

Products

(i) Related to the Proposed Project

1. Bader, D. A., R. Blake, A. Grimm, R. Hamdi, Y. Kim, R. Horton, 2018: Urban Climate Science. In: Climate Change and Cities: Second Assessment Report of the Urban Climate Change Research Network [C. Rosenzweig, W. Solecki, P. Romero-Lankao, S. Mehrotra, S. Dhakal, and S. Ali Ibrahim (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp.
2. Prakash, S., F. Shati, H. Norouzi, and R. Blake, 2018: Observed differences between near-surface air and skin temperatures using satellite and ground-based data, *Theoretical and Applied Climatology* (online published), doi:10.1007/s00704-018-2623-1.
3. Prakash, S**.**, H. Norouzi, M. Azarderakhsh, R. Blake, C. Prigent, and R. Khanbilvardi, 2018: Estimation of consistent global microwave land surface emissivity from AMSR-E and AMSR2 observations, *Journal of Applied Meteorology and Climatology*, **57(4)**, 907-919, doi:10.1175/JAMC-D-17-0213.1.
4. Blake, R., Liou-Mark, J., Norouzi, H., Vladutescu, V., Yuen-Lau, L, and Ikramova, M. (2017). Bridging Non-Geoscience STEM Majors to the Geoscience Workforce. *Bulletin of the American Meteorological Society*. 2303-2309.
5. Blake, R., Liou-Mark, J., Norouzi, H., Vladutescu, V., Yuen-Lau, L., M. Ikramova: "Bridging Non-Geoscience STEM Majors to the Geoscience Workforce through a Skills Training and

Enrichment Program", Bulletin of the American Meteorological Society (BAMS), BAMS-D-16-0085, 2017.

(ii) Other Related Significant Publications

1. Prakash, S., H. Norouzi, M. Azarderakhsh, R. Blake, and R. Khanbilvardi: "Potential of satellite-based land emissivity estimates for the detection of high-latitude freeze and thaw states", Geophysical Research Letters, 44(5), 2336-2342, doi:10.1002/2017GL072560, 2017.
2. Prakash, S., Norouzi, H., Azarderakhsh, M., Blake, R., and Tesfagiorgis K.: "Global Land Surface Emissivity Estimation from AMSR2 Observations ", IEEE Geoscience and Remote Sensing Letters, DOI: 10.1109/LGRS.2016.2581140, 2016
3. Norouzi, H., S. Prakash, M. Azarderakhsh, R. Blake, and C. Campo, 2016: High-latitude freeze and thaw states detection using satellite-based microwave land surface emissivity estimates, *IEEE International Geoscience and Remote Sensing Symposium*, 10-15 July, Beijing, China, 4890-4893, doi:10.1109/IGARSS.2016.7730276.
4. R. A. Blake, Grimm, T. Ichinose, R. Horton, S. Gaffin, S. Jiong, D. Bader, and C. DeWayne, 2011. Urban climate: Processes, trends, and projections. *Climate Change and Cities: First Assessment Report of the Urban Climate Change Research Network*, C. Rosenzweig, W. D. Solecki, S. A. Hammer, S. Mehrotra, Eds., Cambridge University Press, Cambridge, UK, 41-79.
5. Blake, R., J. Liou-Mark, C. Chukuigwe, "An Effective Model for Enhancing Underrepresented Minority Participation and Success in Geoscience Undergraduate Research", Journal of Geoscience Education, 61(4), 405-414 (2013)

Synergistic Activities

- Director of the CREST Institute Center for Remote Sensing and Earth System Sciences at New York City College of Technology.
- Principal Investigator of NSF grant # ICER-1801563, $309,911, GP-EXTRA: Expanding an Innovative Pathway to Replenish the Geoscience Workforce with Underrepresented Minority Non-Geoscience STEM Majors 9/18-8/20. This grant expands a model to train and prepare STEM students for the geoscience workforce.
- Principal Investigator of NSF grant # ICER-1540721, $496,786, GP-EXTRA: Recruiting and Retaining Non-geoscience Minority STEM Majors for the Geoscience Workforce, 9/15-8/18. This grant pilots a model to train and prepare STEM students for the geoscience workforce.
- Principal Investigator of NSF grant # GEO-1108281, $186,194, OEDG: Creating and Sustaining Diversity in the Geo-Sciences Among Students and Teachers in the Urban and Coastal Environment of New York City, 9/11-8/13. This grant advanced diversity in the geosciences by providing a unique array of pedagogical and research opportunities for undergraduates, K – 12 students and teachers.
- Principal Investigator of NSF grant # AGS-1560050, $535,484, REU Site: Experience for Undergraduates in Satellite and Ground-Based Remote Sensing at NOAA-CREST: Expanded Opportunities, 6/16-5/19. This grant funds seminars, summer internships and school-year research assistantships for the selected students.

Biographical Information

Name: **Benjamin Heim Shepard**
Title: Professor
Department: Human Services Department
College: New York City College of Technology
Date of full-time hire at CUNY: January 2007
Email address: bshepard@citytech.cuny.edu
Telephone: 917.586.7952

Education

- 2006 Ph.D. in Social Welfare, Graduate Center, City University of New York
- 2005 William Alanson White Institute of Psychiatry, Psychoanalysis, and Psychology New York, NY. Intensive Psychoanalytic Psychotherapy Program (IPPP)
- 1997 A.M. in Social Welfare, School of Social Service Administration, University of Chicago, with a concentration in Administration and Organizing
- 1992 BS, Pitzer College, Claremont, California

Academic and professional recognition:

In 2010, he was named to the Playboy Honor Role as one of twenty professors "who are reinventing the classroom." A social worker, he has worked in AIDS services / activism for two decades, joining ACT UP Golden Gate in the early 1990's, opening two congregate facilities for people living with HIV/AIDS, serving as deputy director for a syringe exchange program, all while remaining active in efforts to bridge the gap between direct action and direct services. His novel about these years, *Illuminations on Market*, was a finalist in the 2017 Faulkner Wisdom creative writing competition. Today, he remains involved in organizing efforts around transportation, HIV/AIDS, labor, public spaces and environmental policy. Trained at the University of Chicago School of Social Services Administration, the City University of New York Graduate Center, the William Alanson White Institute of Psychiatry, Psychoanalysis, and Psychology as well as through collaboration with some of the most powerful organizers and movements of this era, Shepard combines these experiences to frame his community practice.

Collaborators (in the past 24 months):

Mark Noonan, English, New York City College of Technology

Mery Diaz, Human Services, New York City College of Technology

Synergistic activities:

I am particularly interested in notions of sustainable urbanism, combining cycling, non-polluting transportation, and green spaces into a livable model for cities. I have a vivid memory of a cold February bike ride with the Occupy Wall Street Sustainably Committee, collaborating with several garden and cycling groups. We rode from Zuccotti Park up through some vacant lots throughout the Lower East Side. Borrowing a page from the Green Guerillas, we spent the ride throwing Seed Bombs into the lots. Falling, each seed clashed on the ground, colliding with the dirt

while laying the groundwork for a new community garden and by extension a different way of looking at the world. Each offered a new possibly for a spring which just might sprout something wonderful. Taking part, we were all invited to see urban lots as green spaces and the city as a sustainable space capable of regenerating itself. Most of the people in the world live in cities. If cities can survive, maybe the world can?

Educational and training experience (last five years only):
Craig Hughes,
Chair of Curriculum Committee at City Tech.

Brief narrative highlighting your research career, your current interests, and your most significant achievements:
By day, Benjamin Shepard, PhD, LMSW, works as Professor of Human Services at City Tech/CUNY. By night, battles to keep New York from becoming a giant shopping mall. To this end, he has done organizing work with the AIDS Coalition to Unleash Power (ACT UP), SexPanic!, Reclaim the Streets, Times UP, the Clandestine Rebel Clown Army, Absurd Response, CitiWide Harm Reduction, Housing Works, More Gardens Coalition, Times UP!, Right of Way, and Occupy Wall Street. He is also the author/editor of ten books, including: *White Nights and Ascending Shadows: An Oral History of the San Francisco AIDS Epidemic* (1997), *From ACT UP to the WTO: Urban Protest and Community Building in the Era of Globalization* (2002), *Queer Political Performance and Protest* (Routledge, 2009) *The Beach beneath the Streets: Contesting New York's Public Spaces* (with Greg Smithsimon, SUNY Press, 2011) and *Play, Creativity, and Social Movements: If I Can't Dance, Its Not My Revolution* (Routledge, 2011), *Brooklyn-Tides* (with Mark Noonan, Transcript, 2018*), Illuminations-on-Market-Street* (Ibidem, 2019), *Narrating-practice-with-children-and-adolescents* (co edited with Mery Diaz, Columbia University Press, 2019), as well as *Sustainable Urbanism* (In Press, 2020).

Biographical Information

Name: **Mery Diaz**
Title: Associate Professor
Department: Human Services
College: New York City College of Technology
Date of full-time hire at CUNY: 08/26/2012
Email address: mdiaz@citytech.cuny.edu
Telephone: 917-678-5538

Education

- 2011 DSW, School of Social Policy & Practice, University of Pennsylvania
- 2001 MSW, Wurzweiler School of Social Work, Yeshiva University
- 1999 BA, New York University

Certificates

- Post-Masters Certificate in Advanced Clinical Practice with Adolescents, New York University
- Seminar in Field Instruction, Fordham University

License and Credential

- NYS Licensed Clinical Social Worker
- Disaster Relief Crisis Counseling
- Classroom Organization and Management Program

Academic and professional recognition:
Mery Diaz is an Associate Professor in the Human Services Department at New York City College of Technology/CUNY (City Tech). She holds a doctorate in clinical social work from the University of Pennsylvania's School of Policy and Practice. Dr. Diaz is a licensed clinical social worker and practiced with children, adolescents, and families in a variety of mental health settings. As a consultant, she worked in high-need public schools facilitating training on child and adolescent mental health, wellbeing and supporting the development of integrated mental health systems. The transition to academia-where she brings together theory, practice, and teaching- was a natural next step upon completing doctoral studies. Rather than approaching the different facets of academic work as separate entities, she focuses on integrating scholarly activity, teaching, service, and activism so that they are extensions of one another, built from the foundation of her area of practice- children and youth.

Collaborators (in the past 24 months):
Ben Shepard, Social Work, New York City College of Technology

Synergistic activities:
Dr. Diaz is currently the faculty liaison for CREAR Futuros at City Tech, a peer-mentoring program grant-funded by the Hispanic Federation to support first-year undergraduate Latinx students and has engaged in undergraduate research. She serves on the interdisciplinary Hispanic Serving Institution Organizing Committee where she has co-authored a position paper Villatoro, M., Diaz,

M., Garcia, R., & Mendoza, B.*(2019)* Position Paper: New York City College of Technology as Hispanic Serving Institution Submitted to the Office of the Provost an analysis of status of the college as a Hispanic Serving Institution. Additionally, the committee has organized the annual forums and presented the findings from this work. She has been a long-time faculty participant in the First-Year Learning Communities program. She also participates in the First-Year Learning Community initiative and research team and has presented on data from this work at national conferences. The following publications have stemmed from this collaboration:

- A. Satyanarayana, K. Goodlad, J. Sears, P. Kreniske, M. Diaz, and S. Cheng, "Using Natural Language Processing Tools on Individual Stories from First-Year Students to Summarize Emotions, Sentiments, and Concerns of Transition from High School to College", *126th ASEE Annual Conference 2019*, Tampa, FL, June 16-19, 2019. Published Conference Paper.
- Goodlad, K., Cheng, S., Sears, J., Diaz, M., Satyanarayana, A., Kreniske, P. (2019). "Our Stories": First-year Learning Communities Students Reflections on the Transition to College. *Learning Communities Research and Practice*, 7(2)

This work is demonstrative of her engagement in interdisciplinary collaboration at the college. Her previous interdisciplinary activity include, Living Lab Fellowship program where she worked on general education outcomes across the curriculum and The National Endowment for the Humanities Fellowship where she worked on Comparative Perspectives on Health, Illness and Healing to enable faculty from the departments of allied health, and consequently, their students, to become more thoughtful, culturally competent, and ethically aware practitioners by better understanding variables of philosophy, values, and culture that underlie medical practice in different societies. Dr. Diaz has developed an independent study course module that integrates interdisciplinary perspectives, "Interdisciplinarity, in Theory, Research, and Practice." In the spring of 2019, Dr. Diaz was nominated for the Scholar on-Campus award at City tech.

Brief narrative highlighting your research career, your current interests, and your most significant achievements:

Dr. Diaz has several scholarly publications. Her most recent publications are the co-edited book *Narrating Practice with Children and Adolescents, Columbia University Press* (2019) where she contributes two chapters, the solo-authored chapter, *Finding Justice: Transforming Schools for the Children We Serve,* and co-authored chapter, and *On Narrating Practice with Children and Adolescents* has published in peer-reviewed journals. Other publications include:

- Diaz, M. (2015). *Tales and trails from the consultation: improving school social work and teacher collaboration through interdisciplinary school-based mental health teams in high poverty urban schools.* Reflections: Narratives of Professional Helping, 19, 4, 41-50.
- Diaz, M. (2015). *The "new" DSW is here: supporting the completion of the DSW and developing stewards of the enterprise.* Journal of Teaching in Social Work.
- Diaz, M. (2015), *Facilitating urban school social worker collaboration with teachers in addressing ADHD: A mixed-methods assessment of urban school social worker knowledge*. School of Social Work Journal.

Biographical Information

Name: Jihun Kim PhD AIA LEED
Title: Assistant Professor
Department: Architectural Technology
College: New York City College of Technology
Date of full-time hire at CUNY: 2014
Email address: jkim@citytech.cuny.edu
Telephone:

Professional Preparation

Myungji University,	Seoul Korea,	Bachelor of Engineering,	2001
University of Michigan,	Ann Arbor MI,	Master of Architecture,	2004
University of Pennsylvania,	Philadelphia PA,	PhD in Architecture,	2015

Appointments

Principal consultant, the ISOENV Environmental Design Lab, Philadelphia, PA (Since 2011)
Grad researcher, T. C. Chan Center for Bld Simulation & Energy Studies, Univ. of Penn (2010~2013)
Architect at the Thomson, Ventulett, Stainback and Associates (tvsdesign), Atlanta, GA (2005~2010)

Publications

Kim, J. (2019). From Tangibility to Complexity: Integrating Analog Analysis Techniques and Building Performance Simulation in Architectural Design Process. *In 16th International Conference of IBPSA*. Rome, Italy: International Building Performance Simulation Association.

Kim, J., Yi, Y. K., & Malkawi, A. (2017). Topography Integration to Wind Downscaling. *Building and Environment*, *115*, 306–315. https://doi.org/http://dx.doi.org/10.1016/j.buildenv.2017.01.024

Kim, J. (2016). A Rapid Indoor Airflow Mapping with Two-Dimensional Computational Fluid Dynamics. In P. LaRoche & M. Schiler (Eds.), *32th International Conference on Passive and Low Energy Architecture* (Vol. 2). Los Angeles, CA: PLEA 2016 Los Angeles.

Kim, J. (2015). Energy Analysis of NYCCT Solar Decathlon. In *2015 Solar Decathlon Project Manual for NYC College of Technology*. United States Department of Energy.

Wang, L., & Kim, J. (2015). Building Envelope and Daylight Performance. Brooklyn NY: NYC College of Technology, Emerging Scholar Research Presentation.

Kim, J., Malkawi, A. M., & Yi, Y. K. (2015). *An Urban-Conscious Rapid Wind Downscaling Model for Early Design Stages*. *Architecture*. University of Pennsylvania, Philadelphia, PA.

Yi, Y. K., & Kim, J. (2013). Daylight Mapping Using Kriging. In *13th International Conference of IBPSA*. Chambery, France: International Building Performance Simulation Association.

Kim, J., Phillips, B., & Braham, W. (2013). Discovery-Performance-Design. In *13th International Conference of IBPSA*. Chambery, France: International Building Performance Simulation Association.

Kim, J., Yi, Y. K., & Malkawi, A. M. (2011). Building Form Optimization in Early Design Stage to Reduce Adverse Wind Condition, Using Computational Fluid Dynamics. In *12th Conference of International Building Performance Simulation Association*. Sydney, Australia: International Building Performance Simulation Association.

Related Teaching Experiences: Undergraduate and Graduate:

ARCH 1250 Site Planning and Sustainability, New York City College of Technology

ARCH 3550 Building Performance Workshop, New York City College of Technology
ARCH 401 Architecture & Landscape Design, University of Pennsylvania
ARCH 4750 Advanced Simulation for High Performance Buildings, New York City College of Technology
PSCE 5300 Environmental Design, Parsons School of Design, The New School
ARCH 602 Design + Technology Integration Studio, Univ. of Pennsylvania
ARCH 754 Performance Design Workshop, Univ. of Pennsylvania
ARCH 703 Research Design Studio, Univ. of Pennsylvania
ARCH 708 Environmental Design Studio for Master of Environ. Building Design, Univ. of Pennsylvania

Synergistic activities

In the past 5 years, I have been developing building technology courses (ARCH3550 & ARCH4750) that integrate scientific method in architectural education. Incorporating computer simulation technologies and climatic analysis, students became literate to assess architectural design for its environmental performance. Adopting state-of-the-art technologies help to expand their view in conventional paths and to open possibilities in new career.

In 2017-2018, the National Endowment for the Humanities (NEH) grant proposal entitled, A Cultural History of Digital Technology, I participated developed a GIS (Geographic Information System) module for architecture students. As a NEH fellow, I made this effort to integrate an advanced technology to the college's architectural curriculum, getting students prepared for a forward-looking career.

In 2014-2015, Co-PI on NSF TUES: "Center for Performative Design and Engineering Technology: Pioneering Performative Processes in Design and Engineering Technology Education", I developed teaching modules for college-wide use, regarding environmental assessment, including "climate & weather", "comfort & design strategies", and "fluid flow & CFD".

In 2011-2014, prior to the current appointment, I have been incorporating environmental simulation technologies into seminar courses and design studios in both undergraduate and graduate architecture programs in the University of Pennsylvania. With Dr. Franca Trubiano, I taught CFD (Computational fluid dynamics) simulation, targeting to promote scientific methods for natural ventilation in high-rise buildings. With Dr. Willian Braham, I had been developing technology-oriented course works for a new post-graduate program, Master of Environmental Building Design. In this program, environmental analysis became the primary tool performative design in architecture, regarding energy, daylight, and airflow. In Landscape Architecture Program, I participated in developing a new course, 'Simulated Nature' by Prof. Keith VanDerSys, in which urban forms were assessed for its wind impact with computational methods.

Collaborations and other affiliations

Graduate Advisors:

Dr. William Braham, Professor of Architecture, University of Pennsylvania, PA
Dr. Franca Trubiano, Associate Professor of Architecture, University of Pennsylvania, PA

PhD Thesis Advisors:

Dr. Ali M. Malkawi, Professor of Architectural Technology, Harvard University, MA
Dr. Yun Kyu Yi, Assistant Professor of Architecture, Univ. of Illinois, Urbana-Champaign, IL
Dr. Jennifer Lukes, Professor of Mechanical Engineering, University of Pennsylvania, PA

Current and Pending Funding

List of Funding Currently Available
(include no-cost extensions or start-up funds)

Please list most recent funding of current projects in the following format:

Title: n/a
Agency: n/a
Funding period: n/a
Role of faculty member (i.e. PI, co-PI, etc.): n/a
Total Award: n/a

List of Pending Proposals
(include timelines for potential funding)

Please list details of any pending proposals for which you would receive funds in the following format:

Title: n/a
Agency: n/a
Budget: n/a
Role of faculty member (i.e. PI, co-PI, etc.): n/a