DAEJIN KIM Ph.D., EDAC, CAPS, LEED Green Associate

Assistant Professor, Department of Interior Design, College of Design, Iowa State University 376 Design, 715 Bissell Road Ames, IA 50011 352-226-4064 | daejink@iastate.edu

I. CANDIDATE INFORMATION

| Education | |
|---------------|--|
| 2016 | Doctor of Philosophy in Design, Construction, and Planning |
| | College of Design, Construction, and Planning, University of Florida, Gainesville, FL |
| | Minor in Research Evaluation Methodology: Quantitative Methods, |
| | Dissertation: "Toward design strategies for fall prevention: A case-control study of home safety in a senior living community" |
| 2010 | Master of Science in Housing & Interior Design |
| | College of Human Ecology, Yonsei University, Seoul, South Korea |
| | Thesis: "Planning for healing environment through evidence-based design: Focusing on geriatric hospital" |
| 2008 | Bachelor of Science in Engineering (Architectural Engineering) |
| | College of Engineering, Inha University, Incheon, South Korea |
| Professional | Experience |
| 2018- | Assistant Professor (Tenure-track) |
| | Department of Interior Design, College of Design, Iowa State University, Ames, IA |
| | Human-Computer Interaction Graduate Program (affiliated faculty) |
| 2017- | Post-Doctoral Research Fellow of Housing Research |
| 2018 | Department of Family and Consumer Sciences, North Carolina Agricultural and Technical State University, Greensboro, NC |
| 2012 | Part-time lecturer (one semester) |
| | Department of Interior Design, Shin Ansan University, Ansan, South Korea |
| 2010- | Design Researcher |
| 2012 | Urban Research Lab, Seoul Housing & Communities Corporation, Seoul, South |
| | Korea |
| 2001- | Interior Designer |
| 2003 | Ol Design Studio, Seoul, South Korea |
| Licensure / C | Certification |
| 2018 | Certified Aging in Place Specialist (CAPS) National Association of Home Builders |
| 2016 | Evidence-Based Design Accreditation & Certification (EDAC), CHD-102886 The Center for Health Design |

| 2016 | U.S. Green Building Council |
|------|--|
| 2016 | Interdisciplinary Certificate in Gerontology University of Florida, FL, Gainesville |
| 2008 | Engineer Architecture, #072011023360 Human Resources Development Services of Korea, South Korea |
| 2005 | Industrial Engineer Interior Architecture, South Korea, #05202075345J Human Resources Development Services of Korea, South Korea |

II. SCHOLARSHIP

Book Publication

Kim, D., & Kopec, D. Space planning for healthcare design, Bloomsbury 2024¹ Publishing

| Journal Artic | :les [Peer Reviewed] |
|---------------|---|
| 2023 | Kim, D., Lee, M., Kang, J. Exploring differences in home modification strategies according to housing location and disability status of the household: Analysis of the 2019 American Housing Survey, <i>Journal of Applied Gerontology</i> (SSCI, IF:3.0), https://doi.org/10.1177/07334648231202678 |
| 2023 | Lee, M., Kim, D ., Bian, J., Romero, S., Bliznyuk, N. Identifying demographic and home features influencing older adults' home functioning by using machine learning models, <i>Archives of Gerontology and Geriatrics</i> (SCI, IF=4.163), https://doi.org/10.1016/j.archger.2023.105149 |
| 2023 | Alam, S, Kim, D., Wayfinding design for older adults with dementia in a long-term care facility, <i>Health Environment Research and Design Journal</i> (SSCI, IF=3.233), https://doi.org/10.1177/19375867231185851 Parks, M., Kim, D. Using a web-based digital simulation to foster empathy for older adults with eye impairments, <i>Educational Gerontology</i> (SSCI, IF: 1.389), https://doi.org/10.1080/03601277.2023.2180205 |
| 2022 | Kim, D., Bian, H., Chang, C., Dong, L, Margreet, J. Unobtrusive in-home monitoring for aging in place: A scoping review, <i>Interactive Journal of Medical Research (ESCI, IF=2.0), 11</i> (2):e39005, https://www.i-jmr.org/2022/2/e39005/ |
| 2022 | Lee, M.J., Kim, D ., Romero, S., Hong, I., Bliznyuk, N., Velozo, C. Examining older adults' home functioning using the American Housing Survey. <i>Int. J. Environ. Res. Public Health (SSCI, IF=4.50)</i> , 19, 4691, https://doi.org/10.3390/ijerph19084691 |
| 2021 | Kim, D. Understanding how older adults negotiate environmental hazards in their home, <i>Journal of Aging and Environment (SCOPUS, SJR IF=0.383), 36</i> (2), 173-193, https://doi.org/10.1080/26892618.2021.1918814 |

¹ The book is currently undergoing revisions following peer-review and will be published in 2024.

- Sprowls, M., Serhan, M., Chou, E., Lin, L., Frames, C., Kucherenko, I., Mollaeian, K., Li, Y., Jammula, V., Logeswaran, D., Khine, M., Yang, Y., Lockhart, T., Claussen J., Dong, L., Chen, J. J., Ren, J., Gomes, C., **Kim, D**., Margrett, J., Narasimhan, B., Forzani, E. Integrated sensing systems for monitoring interrelated physiological parameters in young and aged adults: A Pilot study, *International Journal of Prognostics and Health Management (SCOPUS, IF=0.53), 12*(4), 1-15, https://doi.org/10.36001/ijphm.2021.v12i4.2914
- **Kim, D.,** Chang, C., Margaret, J. Understanding older adults' perception and usage of indoor lighting in independent senior living, *Health Environment Research and Design Journal (SSCI, IF=3.233), 14*(3), 215-228, https://doi.org/10.1177/1937586720988616
- Parrott, K R., Lee, S., **Kim, D.,** Robinson, S. R. & Giddings, V. L. The role of informal support systems in residential environments for low-income older renters: An exploratory study, *Housing and Society (Scopus, SJR IF=0.154), 48*:3, 314-327, https://doi.org/10.1080/08882746.2020.1839841
- **Kim, D.**, Bosch, S. J., Lee, J. H. Alone with others: Response and needs of college students at the academic library, *Journal of Academic Librarianship (SSCI, IF=1.953), 46*(2), 102098, https://doi.org/10.1016/j.acalib.2019.102098
- **Kim, D.**, Lee, S., Kim, S-K, Giddings, V. L., & Robinson, S. R. Home environmental barriers for low-income older renters: An empirical study with the aging-in-place perspective. *Journal of Architectural and Planning Research*, *36*(1), 15-34, [SSCI, IF=0.439]. https://www.jstor.org/stable/26949371
- Lee, S., **Kim, D**., Kim, S-K., Parrott, K. R., Giddings, V. L., & Robinson, S. R. Emerging themes on aging in place from low-income elderly renters, *Housing and Society (Scopus, SJR IF=0.154), 46*(2), 110-127, https://doi.org/10.1080/08882746.2019.1613880
- Lee, S., **Kim, D**., Parrott, K. R., Giddings, V. L., & Robinson, S. R. Financial and health challenges for low-income (US) elderly homeowners aging in place, *Journal of Family and Consumer Sciences (ERIC, SJR IF=0.38), 111*(2), 31-42, https://doi.org/10.14307/JFCS111.2.31
- **Kim, D.,** & Portillo, M. Fall hazards within senior independent living: A case-control study of high and low fall rate buildings, Health Environment Research and Design Journal (SSCI, IF: 3.233), 11(4), 65-81, https://doi.org/10.1177/1937586717754185

Work prior to joining ISU faculty

- Lee, S., **Kim, D**., Parrott, K. R., Giddings, V. L., & Robinson, S. R. Perceptions on residential environments for urban low-income elderly homeowners aging in place, *Housing and Society, 44*(1-2), 4-21, https://doi.org/10.1080/08882746.2017.1384992
- **2017 Kim, D.**, & Ahrentzen, S. Environmental and behavioral circumstances and consequences of falls in a senior living development, *Journal of Housing for the Elderly*, *31*(4), 286-301, https://doi.org/10.1080/02763893.2017.1335667

- Platt, L. S., Bosch, S. J., & **Kim, D**. Toward a framework for designing personcentered mental health interiors for veterans, *Journal of Interior Design*, 42(2), 27-48.
- Bosch, S. J., Apple, M., Hiltonen, B., Worden, E., Lu, Y., Nanda, U., & **Kim, D**. To see or not to see: Investigating the links between patient visibility and potential moderators affecting the patient experience, *Journal of Environmental Psychology*, 47, 33-43
- 2016 Campbell, N., & **Kim, D**. Designing an ageless social community: Adapting a new urbanist social core to suit baby boomers in later life, *Journal of Housing for the Elderly, 30*(2), 156-174
- **Kim, D.,** Lee, J. H., & Ha, M. Exploring perceptions of designers and medical staff in South Korea about design elements for the elder-friendly hospital, *Journal of Interior Design*, 39(4), 15-32

Invited Publications [Editor]

Kim, D. Residential design for reducing falling risks, *Korea Housing Association*², 15(2), 5-10

This paper examined various factors related to older adults' falling in their homes and provided design strategies to minimize injuries.

Conference Presentations [Peer-Reviewed Abstracts]

- Alam, S, **Kim, D.,** Wayfinding design for older adults with dementia in a long-term care facility, Interior Design Educators Council (IDEC) Annual Conference, March 8-12, Vancouver, 2023 [Poster presentation]
- Parks, M., **Kim, D.** Using a web-based digital simulation to foster empathy for older adults with eye impairments, Interior Design Educators Council (IDEC) Annual Conference, March 8-12, Vancouver, 2023 [Poster presentation]
- **Kim, D.,** Lee, J., Das, B., Peterson, N. *Revitalizing small communities for aging population in lowa: Making home modifications more accessible*, Housing Education Research Association (HERA) conference, October 16-18, 2022, St. Louis, MO
- 2022 Campbell, C., **Kim, D**., Funke L., Wehr, T. *Micro-hospitals: Design for inclusive healthcare delivery*, Healthcare Design Conference, October 9-11, 2022, San Antonio, TX
- **Kim, D.**, Campbell, C. *Teaching interdisciplinary healthcare design studio with real-world problems*, Environmental Design Research Association (EDRA) 53th Annual Conference, April 1-4, 2022, Greenville, SC
- **Kim, D.,** Campbell, C., Song, J. Changing perceptions of design students in interdisciplinary healthcare design studio, Interior Design Educators Council (IDEC) Annual Conference, March 1-4, 2022; Virtual
- **Kim, D.,** Chang, C., Margaret, J. *Toward new ambient intelligence technology of lighting system in senior housing facilities*, Housing Education Research Association (HERA) Conference, October 31-November 3, 2021; Virtual

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² Korea Housing Association is a top-tier academic publication in South Korea. This manuscript was written in Korean.

- **Kim, D.,** & Cho, Y. *Uncovering hidden dimensions of lighting assessment through a computer simulation*. Interior Design Educators Council (IDEC) Annual Conference, March 1-5, 2021; Virtual
- 2020 Chang, Y., Faccin, V., Malloy, E., **Kim, D.** Designing for all senses: Empowering brand identity through multi-sensory design, Environmental Design Research Association (EDRA) 51st Annual Conference, April 4-7, 2020: Virtual
- **Kim, D.,** Chang, C., Margaret, J. Living in darkness: Lighting issues in a senior housing, Environmental Design Research Association (EDRA) 51st Annual Conference, April 4-7, 2020, Virtual
- **Kim, D.** The circumstances and consequences of falls among the oldest old in an independent living community, Housing Education Research Association (HERA) Conference, November 10-13, 2019, Austin, TX
- 2019 Lee, S., Mo, Y., **Kim, D.,** Parrott, K., Kim, S., Giddings, V. L., & Robinson, S. R. Residential environment perceptions by tenure type among urban low-income older adults, Housing Education Research Association (HERA) conference, November 10-13, 2019, Austin, TX
- Campbell, C., Ade-Aina, B. O., **Kim, D.** Making a case for evidence-based design precedents in architectural education. Inaugural International Nursing Conference for Excellence in Healthcare Design, August 14-17, 2019, Clemson, SC [Poster presentation]
- 2019 Campbell, C., **Kim, D.,** Song, J. Lessons from an interdisciplinary wellness design practice studio. Inaugural International Nursing Conference for Excellence in Healthcare Design, August 14-17, 2019, Clemson, SC [Poster presentation]
- Lee, S., Parrott, K., **Kim, D.,** Giddings, V. L., & Robinson, S. R. *Understanding 'aging in place' practices for low income elderly homeowners in NC urban areas*,

 American Association of Family and Consumer Sciences (AAFCS) conference, June 23-26, 2019, St. Louis, MO
- **Kim, D**. Negotiating environmental challenges: How does older adults adapt to their environment? Interior Design Educators Council (IDEC), March 6-9, 2019, Charlotte, NC
- **2019 Kim, D.**, Lee, J., Bosch, S. *Alone with others: A dialectical interplay of college students' needs and preferences at a university library.* Interior Design Educators Council (IDEC) 2019, March 6-9, Charlotte, NC
- Parrott, K., Lee, S., **Kim, D**., Giddings, V. L., & Robinson, S. R. *Aging-in-Place: The role of informal support systems*, Housing Education Research Association (HERA), October 7-10, 2018, Savannah, GA

Work prior to joining ISU faculty.

- **Kim, D.**, Lee, S., Kim, S., Giddings, V. L., & Robinson, S. R. *Mitigating home environmental challenges for older renters in low-income community dwellings*. American Association of Family and Consumer Sciences (AAFCS) conference, Atlanta, GA, June 24-27, 2018
- Young, L., Lee, S., **Kim, D**., Giddings, V. L., Robinson, S. R. *Housing Unit Location and Food Dessert Issues for Low-Income Elderly Renters*. North Carolina American

Association of Family and Consumer Sciences (NCAFCS) conference, Wilmington, NC, March 22-24, 2018 2018 Walston, S., Lee, S., Kim, D., Giddings, V. L., Robinson, S. R. Health Concerns among Low-Income Elderly Renters: Aging in Place. North Carolina American Association of Family and Consumer Sciences (NCAFCS) conference, Wilmington, NC, March 22-24, 2018 2018 Lee, J., Portillo, M., Kim, D. Finders or makers? Lessons offered across the disciplines on developing creative confidence. Interior Design Educators Council (IDEC), Boston, MA, March 7-10, 2018 2017 Kim, D., Lee, S., Kim, S., Giddings, V. L., & Robinson, S. R. Environmental challenges of NC low-income elderly renters. Housing Education Research Association (HERA) conference, Lowell, MA, October 8-11, 2017 Lee, S., Kim, D., Parrott, K. R., Giddings, V. L., & Robinson, S. R. Residential 2017 environment for NC Urban low-income elderly homeowners aging in place. Housing Education Research Association (HERA) conference, Lowell, MA, October 8-11, 2017 2017 Kim, D. Uncovering differences in environmental hazards from objective and subjective assessment approaches. Environmental Design Research Association (EDRA) 48th Annual Conference, Madison, WI, May 31-June 3, 2017 2017 Kim. D., & Portillo, M. Case-control study of environmental hazards associated with residents' fall risks within senior independent living. Interior Design Educators Council (IDEC) conference, Chicago, IL, March 8-11, 2017 2016 Bosch, S., & Kim, D. Mission accomplished? Evaluating a technology-infused collaborative place for students. Environmental Design Research Association (EDRA) 47th Annual Conference, Raleigh, NC, June 1-4, 2016 2015 Kim, D., & Portillo, M. How do perceptions of the physical environment change in later life?, Environmental Design Research Association (EDRA) 46th Annual Conference, Los Angeles, CA, May 27-30, 2015 2014 Lee, J. H., Kim, D., & Portillo, M. How can I change the world? Exploring high impact creative learning experiences across majors with implications for Interior Design, IDEC regional conference, Tallahassee, FL, October 24-25, 2014 2013 Kim, D., & Torres, M. The development of a framework for evaluating evidence in evidence-based healthcare design. Healthcare Design Conference, Orlando, FL, November 16-19, 2013 2013 Kim, D., & Lee, J. H. Toward multidisciplinary healthcare design: Contrasting views of designers and medical staff. Environmental Design Research Association (EDRA)

Invited Lectures and Presentations (Internal)

Lighting design for older adults, Industrial Design Senior Studio (Pollock), January 22, 2022

44th Annual Conference, Providence, RI, May 29-June 1, 2013

2019- Research Presentation, DSN S 501X Introduction to Research Design, (Dhadphale), November 4, 2019 & November 16, 2020

- 2019 Innovation in aging: Role of the environment in older adults' falls prevention, Gerontology program (Margaret and Hillman), January 22, 2019
- 2018 Smart home housing for older adults, COMS 414/514 Geron-technology (Chang), September 6, 2018

Invited Lectures and Presentations (At other universities in South Korea)

- How interdisciplinary research and design are transforming healthcare design: Insight and best practices, Seminar class (Ha), Yonsei University, Seoul, South Korea, June 12, 2023
 - Role of interior designs in super-aged society, Department seminar (Lee), Chung-Ang University, Anseong, South Korea, June 5, 2023
- 2022 Healthcare design now and Future, Seminar class (Seo), Hankyong National University, Anseong, South Korea, June 13, 2022
- Aging in Place: Safety at Home, Seminar class (Ha), Yonsei University, Seoul, South Korea, November 29, 2021; Virtual

Invited Conference Presentations

- 2020 Fall prevention design, Korea Housing Association Autumn Conference, Seoul, South Korea, November 15, 2020; Virtual
- 2019 Public housing in the U.S.: Co-location project, Seoul Housing & Communities Corporation, and Korean Architecture Association Seminar, December 19, 2019

Invited Outreach Presentations

- 2023 Is your home ready for aging in place? ISU Retirees' Lecture Series, January 26, 2023; Virtual
- Mental Health in Older Adults Webinar Series, Living with Dignity Appropriate
 Aging Settings and Age-Friendly Communities, Joining as one of three presenters,
 September 1, 2022; Virtual,
 https://hhs.iowa.gov/DependentAdultProtectiveServices/Families/Resources
- 2022 Making the homework to age in place, In-Depth Week: Aging in Iowa, Joining as one of four panelists by The Gazette, July 21, 2022; Virtual, https://www.iowaideas.com/in-depth/aging-2022
- 2021 Understanding older adults' perception and usage of indoor lighting in independent senior living, EBD Journal Club, August 12, 2021; Virtual with Bian, H & Margaret, J, https://www.healthdesign.org/events/361
 - Home modification for successful aging in place, Iowa Fall Prevention Coalition, January, 14, 2021; Virtual
- 2019 Office design trend, EMC Insurance (Innovation lab director in EMC Insurance: Santos), Des Mones, IA, USA, September, 13, 2019,
 - Fall prevention design, Green Hill Retirement Community (CEO: Copple), Ames, IA, USA, February, 14, 2019, Invited by CEO in Green Hill Retirement, Rod Copple

Local Press

2022 ISU interior design students present home modifications for aging adults, Globe Gazette, <u>Link</u>

ISU students offer Charles City ideas on how to make homes more age-friendly, Charles City Press, <u>Link</u>

Symposium Contribution

2018

Lee, S., Kim, S.-K., Parrott, K. R., **Kim, D**., Giddings, V. L., & Robinson, S. R. *Aging in place challenges for urban low-income older renters*. In M. Ahn (Chair), Aging In Place (AIP). Symposium conducted at the Annual Conference of the Housing Education and Research Association, October 7-10, 2018, Savannah, GA

III. TEACHING

Courses Taught

| Term | Course # | Course Title | Cr | Enrollment |
|--------|-------------|--|----|------------|
| SS2023 | DSN S 501 | Introduction to Research Design | 3 | 22 |
| 52023 | ARTID 367 | ID STUDIO III | 4 | 16 |
| 32023 | ARTID 570X | Social Entrepreneurship in Aging | 3 | 16 |
| F2022 | DSN S 501 | Introduction to Research Design | 3 | 17 |
| FZUZZ | ARTID 465 | ID STUDIO V | 4 | 18 |
| 52022 | DSN S 546 | Interdisciplinary Design Studio: Design for Health (Co-teaching with Campbell) | 6 | 23 |
| | ARTID 569A | Environmental Psychology for Design | 3 | 19 |
| F2024 | DSN S 501X | Introduction to Research Design | 3 | 12 |
| F2021 | ARTID 465 | ID STUDIO V | 4 | 13 |
| S2021 | DSN S 546 | Interdisciplinary Design Studio: Design for Health (Co-teaching with Campbell) | 6 | 23 |
| | ARTID 552 | Design Method: Evidence-based Design | 2 | 9 |
| F2020 | ARTID 465 | ID STUDIO V | 4 | 15 |
| F2020 | ARTID 551 A | Design Humanics: Sensory Design | 3 | 15 |
| S2020 | DSN S 546 | Interdisciplinary Design Studio: Design for Health (Co-teaching with Campbell and Dr. Wheeler) | 6 | 16 |
| | ARTID 552 | Design Method: Evidence-based Design | 2 | 7 |
| F2019 | ARTID 465 | ID STUDIO V | 4 | 16 |
| F2019 | ARTID 551 A | Design Humanics: Sensory Design | 3 | 11 |
| S2019 | DSN S 546 | Interdisciplinary Design Studio: Wellness Design (Co-teaching with Campbell) | 6 | 27 |
| | ARTID 552 | Design Method: Evidence-based Design | 2 | 19 |
| | ARTID 465 | ID STUDIO V | 4 | 11 |
| F2018 | ARTID 660 | Research methods (Co-teaching with Alshihabi, Lee, Irish, & Cho) | 3 | 10 |

Thesis Credit

| Term | Course # | Course Title | Cr | Enrollment |
|-------|------------|----------------------|-----|------------|
| S2023 | ARTID 699B | Research: Exhibition | 5 | 1 |
| 32023 | HCI 699 | Research: Thesis | 3 | 1 |
| | ARTID 699A | Research: Thesis | 6/1 | 2 |
| F2022 | ARTID 699B | Research: Exhibition | 1 | 1 |
| | HCI 699 | Research: Thesis | 6 | 1 |

| S2022 | ARTID 699A | Research: Thesis | 6 | 1 |
|-------|------------|----------------------|-------|---|
| S2021 | ARTID 699A | Research: Thesis | 6 | 1 |
| | ARTID 599 | Creative Component | 4 | 1 |
| S2020 | ARTID 699A | Research: Thesis | 2/1 | 2 |
| | ARTID 699B | Research: Exhibition | 2 | 1 |
| F2019 | ARTID 699A | Research: Thesis | 4/6/6 | 3 |
| | ARTID 699B | Research: Exhibition | 2/4 | 2 |
| S2019 | ARTID 599 | Creative Component | 1 | 1 |
| 32019 | ARTID 699A | Research: Thesis | 3/3/3 | 3 |
| F2018 | ARTID 599 | Creative Component | 5 | 1 |

Undergraduate Advising

Undergraduate advising has been undertaken by an undergraduate advisor, but my advising includes career services, portfolio review, graduate program introduction, etc.

Graduate Advising - Major Professor (Ph.D)

2023 Karo Ahmadi-Dehrashid, Doctor of Philosophy, Human and Computer Interaction, Dissertation title: N/A

Graduate Advising - Major Professor (Master)

| raduate Advising - major i rolessor (master) | | | |
|--|---|--|--|
| 2023 Fall (Expected) | Angeline Neo, Master of Science, HCI, Thesis Title: Using technology acceptance model to study the perception of Chinese immigrant older adults using remote patient monitoring, | | |
| 2024 Spring (Expected) | Stephanie Nguyen, Master of Fine Arts, Department of Interior Design, Thesis Title: Sensory design guidelines for the hotel industry in order to influence customer's satisfaction | | |
| 2023 | Hanieh Baktash, Dual degree of Master of Science, Department of Interior Design & HCI, Thesis Title: The role of immersive multi-sensory interior design environment in reducing students' Generalized Anxiety Disorder, | | |
| 2023 | Silvia Adams*, Master of Fine Arts, Department of Interior Design, Thesis Title: Wayfinding design for older adults with dementia in a long-term care facility, | | |
| 2022 | Margaret Parks *, Master of Arts, Department of Interior Design, Thesis Title: Using | | |

- **Margaret Parks***, Master of Arts, Department of Interior Design, Thesis Title: Using digital simulation to create empathy for low vision users in senior living design. https://dr.lib.iastate.edu/entities/publication/7b3da5fc-52ff-47e2-acbf-a3a26dfd4262/full
- **Malloy Eliza***, Master of Arts, Department of Interior Design, Thesis Title: Understanding Millennial's and Generation Z's wants and needs about social amenities in a multi-family housing community.

 https://dr.lib.iastate.edu/server/api/core/bitstreams/9f0481b5-9203-4298-b0db-7168a122b3bf/content
- **Holle Michoski***, Master of Arts, Department of Interior Design, Thesis Title: A study of acute care for the elderly on patient outcomes and unit design considerations. https://dr.lib.iastate.edu/entities/publication/c46ff750-72f1-4a66-aa07-f3eb58e7c626

Bree Howard*, Master of Fine Arts, Department of Interior Design,

Thesis Title: An exploration of the effect of multi-sensory experience on the doorway phenomenon. https://www.proquest.com/docview/2421422758?pq-origsite=gscholar&fromopenview=true

2019 Laura Dammarell*, Master of Arts, Department of Interior Design, Creative component, Project title: Residential biophilia: Creating a nature-based home for better psychological health.

https://dr.lib.iastate.edu/server/api/core/bitstreams/b2131a80-40b3-4a58-abf3-d0d3d920b480/content

Graduate Advising - Committee Member (Masters)

2023 Fall Andrea Burbano, Master of Arts, Department of Interior Design (Expected)

Meng Wang*, Master of Science, Department of Human-Computer Interaction, Creative component Title: A smart home visualization tool

Erendira Gonzalez*, Master of Arts, Department of Graphic Design, Creative component Title: Rebranding & pop-up shops: small businesses and brand experience

Ye Jin Chang*, Master of Fine Arts, Department of Interior Design, Thesis Title: Creating the multisensory brand experience in coffee shops

Nan Hui*, Master of Fine Arts, Department of Graphic Design, Thesis Title: Study on the wechat app to improve user experience for Chinese older adults

Taylor Johnson*, Master of Arts, Department of Interior Design, Thesis Title: Customizable and adaptable furniture: Designing for millennial lifestyles and environmental concerns

Yue Yang*, Master of Fine Arts, Department of Graphic Design, Thesis Title: HUEMXN: An emotion-oriented perspective on developing empathy

Allison Brown*, Master of Arts, Department of Interior Design, Thesis Title: Mortuaries and mindfulness: The study of incorporating meditation spaces into modern mortuaries

Graduate Advising - Committee Member (Ph.D,)

Guy-Serge Emmanuel, Doctor of Philosophy, Human and Computer Interaction, Dissertation title: Exploring race and ethnicity in UX design practice, literature and graduate curriculum

2022- Carie Fisher, Doctor of Philosophy, Human and Computer Interaction, Dissertation title: Digital Accessibility Survey of Information Technology (IT) Professionals

Hongyi Bian, Doctor of Philosophy, Human and Computer Interaction, Dissertation title: TBD (Smart home technologies, blockchain, and digital health)

Graduate Research Assistant Supervised

2019 Holle Michoski, Holle conducted a survey and interview with older adults in a retirement community to understand their perception of their home lighting system. Funding source: Bridging the Divide from the office of the vice president for research

^{*} Graduated at current rank

^{*} Graduated at current rank

Yejin Chang, Yejin conducted a lighting assessment by measuring lighting intensity and types in older adults' houses. Funding source: Bridging the Divide from the office of the vice president for research

Hanieh Baktash, Hanieh helped to create a home assessment tool for aging in place. Funding source: 2020 BNIM Regenerative Design Challenge Grant

Margaret Parks, Margaret helped to create a home assessment tool for aging in place. Funding source: 2020 BNIM Regenerative Design Challenge Grant

Undergraduate Research Assistant Supervised

2021 Fall 2022
 Spring
 Laura Maschino and Kayley Tuchek, Laura and Kayley helped to create a floor plan, diagrams, and renderings for the healthcare design book publication.
 Funding source: Publication Subvention Grant - Scholarly work: Space planning for Healthcare settings

Student Awards

2021

Spring

Erendira Gonzalez, **Steelcase design competition award**, placed in the top 10 of the 6th Annual Steelcase NEXT Student Design Competition. She was one of five honorable mentions awarded out of 900 entries from 70 university programs nationwide (*Supervised her works in a design studio in 2018 Fall semester*)

ISU interior design projects win top 10 recognition in Steelcase NEXT Student Design Competition: Iowa State University College of Design (iastate.edu)

Student Accomplishments

- AIA-AAH STERIS Student Design Charrette Mentor, Students: Keegan Holdrof (Architecture), Megan Adams (Landscape), Brandon Leeder (Architecture), Maggie Parks (Interior Design), Healthcare Design Conference, Cleveland, OH, October 21-26, 2021 (Role: Co-mentor with Campbell)
- 2020 AIA-AAH STERIS Student Design Charrette Mentor, Students: Matthew Bong (Architecture), Calise Gritters (Architecture), Lexis Ruroden (Interior Design), Emily Serchen (Landscape), Healthcare Design Virtual Conference, November 6-8, 2020 (Role: Co-mentor with Campbell)
- 2018 AIA-STERIS Student Design Charrette Mentor, Students: Mathew Townsley (Architecture), Babafemi Ade-Aina (Architecture), Haley Eckenrod (Interior Design), Taylor Danger (Landscape), Healthcare Design Conference, Phoenix, Arizona, November 9-11, 2018 (Role: Co-mentor with Campbell)

Curriculum Development

ARTID 570X: Social Entrepreneurship in Aging (New class): Based on mission and vision of our university, I developed a new class focusing on social entrepreneurship in Aging. Students explored various issues of social, behavioral, and health and well-being in later life and created a design solution to address specific problems.

ARTID 569A: Environmental Psychology for Design (New class): This course was dedicated to understanding human-environment interactions at the different layers of psychology and human behaviors. Students examined the complex interaction and impact of the built environment on human emotion and behavior through the context of social, behavioral, cultural, and environmental variables.

2021 Fall DSN S 501X: Introduction to Research Design: This course was significantly redesigned. I developed new syllabus, course schedule, lectures, assignments, reading materials, project, and in-class activities

2019 Fall ARTID 551A: Design humanics Sensory perception & ergonomic factors: This course was significantly redesigned. I developed new lectures, assignments, reading materials, projects, and in-class activities. Especially, this class had a joint project of smart home design with students in Geron-technology class (COM 414+514) and gerontology in 2019 and 2020 Fall semester

Spring

ARTID 552: Evidence-based Design (New Class): I designed this new course by developing new course materials, syllabus, weekly schedule, assignments, grading rubrics, lectures, in-class activities and projects. This course introduced Evidence-based Design which is a process for the conscientious, explicit, and judicious use of current best evidence from research and practice in making critical decisions. This class explored how to find, evaluate and synthesize evidence and translate it for design application in a physical environment.

DSN S 3: Wellness Studio: Campbell and I have significantly redesigned course materials, syllabus, lectures, field trip plan, and design projects. The studio focused on various healthcare facilities. With human-centered design and evidence-based design approach, Students designed various wellness and therapeutic environment considering social awareness with an emphasis on patients, family and healthcare staff in their physical environment.

Grants for Teaching (Studio development)

2020- ISU & Shive-Hattery Healthcare Design Studio: DSN S 546 (Interdisciplinary studio), Co-PI with Campbell (\$20,000)

Professional Development

2022-2023 Research Collaboration Catalysts

2022 Fall Active Learning Institute (ALI)

2020 CELT 2020 Summer Course Design Institute (CDI)
Summer

IV. RESEARCH/CREATIVE ACTIVITIES

Grants for Research

External Grants for Research

American Occupational Therapy Foundation – Health Services Research (\$50,000)

Title: Predicting Individuals' Functional Difficulties at Home Using Statistical Machine Learning (P.I: Mi Jung Lee; Collaborator; Romero, Castaneda, Bliznyuk, and Hong)

Role: Collaborator (No fund distributed to ISU)

- **Purpose**: Develop a web-based/mobile friendly tool that identifies older adults in urgent need of home assessment and modification.
- Impact: The results of this study serve as groundwork for larger studies to pre-screen older adults at risk of experiencing unwanted outcomes at home. Such a tool will allow occupational therapists to design home assessment and modification practices tailored to older adults' different disease types and clinical conditions. We believe that this line of research will support evidence-based guidelines of home assessment and modification services through promoting data-driven decision-making practices in occupational therapy.
- **Delivery**: Two journal publication (<u>one published</u>, one under review) and website: https://mjlee.shinyapps.io/Shiny_Project_MJ/

External Grants and Awards for Research [Not funded]

2019- National Science Foundation (NSF) - Engineering Research Centers (ERC)

research grant

Title: Smart home technology for successful aging in place (P.Is: Balaji Narasimhan & Jennifer Margrett)

Role: Collaborator. As a multidisciplinary research team (more than 65 researchers), I have participated in T2a group for a designing a smart home.

Internal Grants and Awards for Research

2023 ISU Foreign Travel Grant

Invited lectures and research collaboration meeting, Seoul, South Korea (\$1,500)

- **CEAH Summer Research Support:** Meaning of Aging in Place to Older Korean Immigrants (\$6,000)
 - Purpose: The main purpose of this research is to understand the challenges and barriers of aging in place of Korean older immigrants and discuss their needs for successful aging in place.
 - **Impact**: The impact of this research is significant as it addresses the challenges and barriers of aging in place that are specific to older immigrants, particularly Korean immigrants. By understanding their perceptions and experiences, this research can shed light on how to better support older immigrants in pursuing successful aging in place.
 - **Delivery**: Conference presentation & journal submission (2023 Fall)
- **Publication Subvention Grant Scholarly work**: Space planning for Healthcare settings (\$9,500)
 - **Purpose**: This grant aimed to publish a textbook for scholarly work. Through this grant, I completed the healthcare design book titled "Space planning for healthcare settings."

- Impact: This book on interior space design for healthcare facilities is targeted at third- or fourth-year undergraduate students enrolled in a CIDA accredited Interior Design program, a NAAB accredited Architectural program, or a NASAD accredited Design program. Additionally, it may be used in graduate programs in Design, Interior Design, Architecture, or Design Studies, or by lifelong learners who have an interest in clinical healthcare environment design.
- Delivery: This book will be published in 2024
- **2020 BNIM Regenerative Design Challenge Grant:** A Best Practice Manual for Aging in Place: Revitalizing Small Communities for Aging Population in Iowa (\$9,500)

Role: Principal investigator

Co-investigators: Sungduck Lee, Biswa Das, and Cameron Campbell

- **Purpose:** The proposed research aimed to investigate further of the challenges associated with making home modifications, especially in a small town context in lowa. The objectives of this research are: 1) to collect and analyze data using GIS that will help categorize existing housing types at the community scale: 2) to determine specific home modification strategies based on individual's needs; and 3) to make pragmatic policy recommendations that could be used to address the challenges related to modification and allow for successful aging in place.
- Impact: This research contributed to enhancing the understanding of the complexities and unique challenges of aging in place in small-town lowa. By addressing these challenges, older adults and those with disabilities will be able to remain in their homes longer, leading to improved quality of life, increased independence, and reduced healthcare costs.
- **Delivery:** Conference presentation (HERA 2022) and invited extension/outreach publications
- 2019 Bridging the Divide from the office of the vice president for research: Saving Older Adults Living in Darkness: Ambient Intelligence Technology of Lighting System (\$24,916)

Role: Principal investigator

Co-investigators: Carl Chang and Jennifer Margrett

- **Purpose**: As an interdisciplinary research project, the purpose of this research aims to create new smart home lighting solutions by developing integrated ambient intelligence technology providing a proper level of illumination in older adult's homes.
- Impact: This research project create a broader impact on smart home design for older adults and contributed to the advancement of knowledge and development of new technologies and new collaborations with computer science and gerontology.
- Delivery: Conference presentation (EDRA 51 and IDEC 2021) and peerreviewed publication (HERD)

Service-Related to Research

Professional Organization Service

2022-Reviewer board member, International Journal of Environmental Research and

Public Health present

2019present

Ad-hoc review board member, Journal of Interior Design

2019-Member, Iowa Fall Prevention Coalition (Iowa Department of Public Health)

present

Invited Journal Article Reviewer

| 2023. 03 | Journal of Librarianship & Information Science |
|----------|--|
| 2022 02 | Journal of Interior Design |

2023. 02 Journal of Interior Design

2023. 01 Journal of Interior Design

2022.11 Journal of Environmental Research and Public Health

2022, 10 Ageing Research Review

2022, 03 Journal of Environmental Research and Public Health

Health Environments Research & Design Journal 2022.02

2021.09 Housing and Society

2021.05 Journal of Environmental Psychology

2021.03 Gerontology and Geriatric Medicine

2021.01 **Environment & Behavior**

2020.11 Gerontology and Geriatric Medicine

2020.06 Health Environments Research & Design Journal

2020.02 Frontiers in Psychology - Environmental Psychology

2019.03 Housing and Society

Environment and Behavior 2019.01

2018.11 Health Environments Research & Design Journal

Invited Award Reviewer

2022 New Investigator Award, Center for Healthcare Design

Invited Abstract Reviewer

| 2023 | Interior Design Educator Council (IDEC) annual conference, Manhattan NY | |
|------|---|--|
| 2022 | Interior Design Educator Council (IDEC) annual conference, Vancouver, Canada | |
| | Environmental Design Research Association (EDRA)53 conference, Greenville, SC | |
| 2021 | Interior Design Educator Council (IDEC) annual conference; virtual | |

Housing Educator Research Association Conference, virtual

Environmental Design Research Association (EDRA)52 conference, Detroit, MI;

Virtual

2020 Interior Design Educator Council (IDEC) annual conference; virtual

Housing Educator Research Association Conference; virtual

2019 Interior Design Educator Council (IDEC) annual conference, Charlotte NC

Housing Educator Research Association Conference, Austin, TX

Environmental Design Research Association (EDRA) 51 conference, Tempe. AZ

Recognitions for Research / Creative Activities

- **Nominated, Housing Impact Award,** Housing Educator & Research Association (Will be announced in October 2023)
- **Faculty Research Award**, College of Design, Iowa State University
- **2020 HERA Kenneth Tremblay Early Career Award**, Housing Educator &

Research Association

V. SERVICE / OUTREACH

Extension / Outreach Publications [Editor Reviewed]

Kim,D., Lee, S., Das, B., Campbell, C. Aging in Place: Revitalizing small communities for aging population in Iowa, *The Iowa County*, *50*(2), 14-15

The main goal of this publication is to introduce our research project sponsored by BNIM grant project. Given that most readers of this journal are extension officers and community staff, this manuscript provided a critical framework for revitalizing small communities for aging population in lowa.

Internal Grants for Extension

2022 Fieldstead & Company Endowment for Community Enhancement Fund:

Revitalizing Small Communities for Aging Population in Iowa: Making Home Modifications More Accessible (\$5,000)

Role: Principal investigator

Co-investigators: Biswa Das, Nicole Peterson, and Jae Hwa Lee

- **Purpose**: The purpose of this project is to conduct a home modification pilot project for older adults living in a rural community in lowa.
- Impact: This project demonstrated a model for small municipal and county governments to work with experts and volunteers to help older households modify their homes to age in place. It allowed the elderly to stay in their social network, promoting social engagement and sustainability. It also helped communities retain older individuals who might have moved due to unsuitable living spaces. Finally, it provided students with practical experience in understanding aging in place and designing outreach to the community.
- Delivery: Conference presentation (HERA 2022) and Journal publication planning (2023 Fall)

University Service

2022- Member, Advisory Council of The Center for Excellence in the Arts and

Humanities (appointed)

2022- Member, Rural Vitality Council (appointed)

College Service

2022- Member, Innovation and Entrepreneurship Scholars (2-year term)

2021- Member, Research, Extension & Outreach Council

2018- Member, International Programs Committee

2020-2021 Member, Diversity, Equity, and Inclusion

2020-2021 Member, Operations Committee

2018-2019 Member, Ad-hoc committee for college-wide research courses
 2018-2019 Member, Ad-hoc committee for interdisciplinary courses

Department Service

| 2022-2023 | Member, New Faculty Search Committee |
|-----------|---|
| 2018 - | Member, Graduate Program Committee |
| 2018-2019 | Member, New Faculty Search Committee |
| 2019 | Chair , Interior Design Governance Documentation Committee |