

ELIZABETH BAUER-NILSEN SANDERS

PERSONAL INFORMATION

Elizabeth B.-N. Sanders
183 Oakland Park Ave., Columbus, OH 43214
liz@maketools.com or Sanders.82@osu.edu

EDUCATION

PhD in Experimental Psychology with a minor in Quantitative Psychology, 1981, The Ohio State University, Columbus, OH

MA in Experimental Psychology, 1977, The Ohio State University

BA in Psychology, 1975, Miami University, Oxford, OH

BA in Anthropology, 1975, Miami University, Oxford, OH

Academic awards and scholarships

Phi Beta Kappa

Phi Kappa Phi

Sigma Xi

University Fellowship, The Ohio State University (1975 to 1979)

PROFESSIONAL EXPERIENCE

Founder, MakeTools, LLC in Columbus, OH (2005 to present) MakeTools uses generative tools to explore collective creativity.

President, SonicRim Inc. in Columbus, OH (1999 to 2005)

SonicRim is a consulting firm that offers design research services to companies who want to stay in tune with and respond to the emerging needs of their customers.

Vice President of Design Research, Fitch Inc. in Columbus, OH (1989 to 1999)

Fitch Inc. is an interdisciplinary design consulting firm serving clients in many industries.

Associate in Design Research, RichardsonSmith Inc. in Columbus, OH (1982 to 1989)

RichardsonSmith was an interdisciplinary design consulting firm that later became Fitch.

TEACHING EXPERIENCE

Associate Professor, Department of Design, The Ohio State University in Columbus, OH (September 2011 to present)

Adjunct Faculty Member/Senior Lecturer, Department of Industrial, Interior, and Visual Communication Design, The Ohio State University in Columbus, OH (1992 to 2011)

Adjunct Faculty Member, Industrial and Systems Engineering, The Ohio State University in Columbus, OH (1989 to present)

Member of the Board of Advisors for the School of Design, Carnegie Mellon University in Pittsburgh, PA (1999 to present)

Honorary Professorship in the School of Design, Faculty of Duncan of Jordanstone College, University of Dundee, Scotland (2007 to present)

ADVISORY BOARD ACTIVITIES

Member of the Steering Committee that is creating a Design Research Association in the US and Canada. The Association was launched at the 2017 IASDR conference being held at the University of Cincinnati.

Member of the Konstfack Advisory Board. The goal for this Board is to re-think what design on an artistic foundation can be in order to craft an education that prepares graduate students for the emerging new challenges. The Konstfack University College of Arts, Crafts and Design is in Stockholm, Sweden.

Advisory Committee member for the new MFA in Design Program for UW-Stout's School of Art + Design.

On the Advisory Board for *Making Sense* with a consortium of EU organizations from NL, ES, UK, XK, IT and BE. The MakeSense project "envision[s] a world of collective sensemaking for sustainable social action." (<http://making-sense.eu/>)

ONGOING PROFESSIONAL COLLABORATIONS

Daishinsha's MCT in Tokyo, Japan. (<http://www.mctinc.jp>)

The Innovation Initiative at The Ohio State University Fisher College of Business
<http://fisher.osu.edu/centers/innovation>

Stratos Innovation Group in Columbus, OH www.thestratosgroup.com

Phillips-Medisize in Hudson, WI <http://www.phillipsmedisize.com>

Design Central in Columbus OH www.design-central.com

Designit in Europe www.designit.com

SELECT CLIENTS ON THE PROFESSIONAL SIDE

The following projects are some in which I have played a major role while serving as a design research practitioner. My responsibilities included design research leadership, primary client contact and integration of the research findings into the design process. Most of this work is proprietary.

Amsco (now STERIS)

- Pre-design research and preliminary design conceptualization for control systems for the operating room.

Artromick International

- Pre-design research and design integration for medication carts for long-term care facilities.
- Design research for a family of mobile workstations for acute care facilities.

AT&T

- User-interface design and product ergonomics for a cellular phone. (*Patent awarded*)

Baxter Healthcare Corporation

- Human factors and user research to develop design guidelines to drive the development of components for a system for Continuous Ambulatory Peritoneal Dialysis.

Becton Dickinson

- User research, human factors, and user-interface design for the BD ProbeTec ET system for advanced clinical molecular diagnostics.

Black & Decker

- Development of cognitive model of the user/consumer that drove the design and development of a packaging and merchandising system for over 2,000 power tool accessories.

Blockbuster

- User research to assess the usefulness and desirability of a proposed theme park.

The Chamberlain Group

- Workshop with the Advanced Development Group at The Chamberlain Group, Inc. to share the tools, methods and mindset of co-creation.

Ciba Corning Diagnostics Corporation

- Human factors and user-interface design for an automated clinical chemistry spectrophotometer, the 550 Express. This was the first successful automated diagnostic instrument of its type.

Coca-Cola

- Generative design research and design integration for an in-store consumer environment.

DuPont

- User research and communication design for a new design development process.

Duracell

- Exploratory design research for the application of a new product technology.

European Commission**(Foresight and Behavioral Insights Unit of the Joint Research Centre)**

- Designed and conducted a training session on *Co-design and Generative Design Research Tools*
- Designed and facilitated a co-design workshop with consortium members of the EU funded Making Sense Project.

GE Appliances

- Created and led a two-day Participatory Design Workshop for the Design Group at GE Appliances, Louisville, Kentucky.

GOJO Industries Inc.

- Exploratory and participatory design research regarding the handwashing experience in public places.
- Exploratory and participatory design research regarding the handwashing experience in healthcare settings.

Harman Kardon

- Generative user research and user-interface design for home entertainment products and systems.

Hornall Anderson

- Lead the co-creation portion of a research project for a confidential client in collaboration with Hornall Anderson project team members in Seattle, Washington.

IBM

- Participatory design research with users and purchasers of a computer product.
- Exploratory design research into the preschool market. (*Patent awarded*)

Iomega

- Generative design research for repositioning the company and for developing new product lines (i.e., Zip, Jaz, and Ditto).

Johnson Controls

- User research and user-interface design for an advanced building automation system.

Kodak

- Generative research for new product development in the teenage marketplace.

Lionel

- Generative user research and design development of a train-related product system for preschool children.

Mallinckrodt

- Human factors and information design for a labeling system and product catalog for Mallinckrodt's complete line of reagent and laboratory chemicals.

Microsoft

- "Joy of use" analysis for an input device (EasyBall) for children.
- Generative user research on gaming devices for PC game players.
- Exploratory research on the perception of comfort.
- Contextual evaluation of user-assistance materials for Microsoft Hardware input devices.
- Generative and participatory research for next-generation computer products for the home.
- About 30 other projects as well

Motorola

- Generative user research on communication styles to inform and inspire new and relevant products and services for the teenage marketplace.
- Exploratory design research on the communication needs and desires of families across the life stages.

Studio NOVA (a collaboration between NBBJ Architects, Eskew+ Dumez+Ripple and Rozas Ward Architects)

- Human-centered design research leadership with a focus on the needs and dreams of Veteran patients and family members for the new Veteran's Administration Hospital campus that was built in New Orleans.

Philips

- Research and user-interface design for a system to support and enhance the work of claims handlers.

PMI Food Equipment Group

- User research, usability analysis, and user-interface design for various pieces of industrial equipment such as scales and blast chillers.

Procter and Gamble

- Exploratory research for new product and service development across a number of product lines including paper towels and toilet paper.
- Internal training sessions on participatory design approach, methods and tools.

Roche Diagnostics

- Exploratory human-centered design research on the needs and dreams of people living with Type 2 Diabetes.
- Exploratory human-centered design research regarding healthcare practitioners who treat people living with Type 2 Diabetes.
- Evaluative research on product and service concepts for people living with Type 2 Diabetes.

Rockingham Memorial Hospital

- Human-centered design research, with a focus on patients and family members, to inform the planning and architecture of the new hospital campus.

Rocky Boots

- Design research lead for an annual innovation event in partnership with The Innovation Initiative at The Ohio State University Fisher College of Business.

Siemens Medical Systems, Inc.

- Human-centered, participatory design research that drove the design of the E.CAM Nuclear Medicine Imaging System for the Nuclear Medicine Group.

The SPRY (Setting Priorities for Retirement Years) Foundation with NHLBI (National Heart, Lung, and Blood Institute)

- Participatory workshop with leading teachers and administrators on the new SPRY High Blood Pressure Awareness Curriculum for Middle Schools.

State Farm

- Design research lead on a co-design process for exploring how people understand car insurance.

Steelcase

- Experiential research on alternative ways of working with a focus on posture.

Sundberg-Farrar

- Design research consulting and a Participatory Design Workshop for Sundberg-Ferar, Inc.

Teledyne Brown Engineering

- User research and human factors to drive the design of the cab interior of a 40K loader for the Air Force.

Texas Instruments

- User research and human factors in the design of electronic toys for children.
- Information design guidelines for instructional materials for a home computer.

Thermos

- User research and human factors in the design of lunch boxes for both children and adults.

Thomson Consumer Electronics

- Generative research to inform and drive the design development of the DirectTV system.
- Experiential research to inform and inspire the design development of next-generation products and services for home entertainment.

Xerox

- Human factors and user interface for a design strategy for reprographic products. This is the design strategy from which all new Xerox products have been developed since 1988.

RECOGNITION FOR DESIGN AND INNOVATION

Patent number 5,805,138: *Gross motion input controller for a computer system*. Brawne, Combs, Sanders and Strothman for International Business Machines Corporation, September 8, 1998.

Patent number 5,841,855: *Menu level indicator or a telephone terminal*. Davidson, Dudley, Gresham, Moroze, Sanders, Subrizi and Tuttle for Lucent Technologies, November 24, 1998.

Juror for the design research submissions for IDEA 2003: The International Industrial Design Excellence Awards, March 2003.

Fast Company Masters of Design Award 2005: Game Changer.

Invention Disclosure: "*Rotating Step Stool*", Sommerich, C.M., Lavender, S.A., Sanders, E., Joines, S., Evans, K., Lamar, S., Yen W.-T., Radin Umar, R.Z., Tech ID #2012-272.

Invention Disclosure: "*Ergonomic Mammography Mirrors for Patient Breast Positioning*", Sommerich, C.M., Lavender, S.A., Sanders, E., Evans, K., Joines, S., Lamar, S., Yen W.-T., Radin Umar, R.Z., Tech ID #2012-185.

PROFESSIONAL AFFILIATIONS

Sigma Xi, The Scientific Research Society

The Human Factors and Ergonomics Society (HFES)

The Design Management Institute (DMI)

Corporate Design Foundation

The Product Development and Management Association

(PDMA) The World Future Society

The Design and Emotion Society

The Institute of Noetic Sciences

PUBLICATIONS

Book

Sanders, E.B.-N. and Stappers, P.J. (2012) *Convivial Toolbox: Generative Research for the Front End of Design*. BIS Publishers, NL.

Chapters in books

Sanders, E. B.-N. (2020) Staging Co-design Within Healthcare: Lessons from Practice. In Dorland, J., Pedersen, S. and Vinck, D. (Editors) *Staging Collaborative Design and Innovation: An Action-Oriented Participatory Approach*, Edward Elgar Publishing, Inc., UK.

Briede, J. C., Sanders, E., Pacheco-Blanco, B. (2020) Co-Creation: A Catalyst to the IDE Development Process. In Vajna, S. (Ed.): *Integrated Design Engineering - Interdisciplinary and Holistic Product Development*. Springer Nature, pp. 495-504.

Sanders, E.B.-N (2018), Design Serving People: Innovation Through Cocreation, In *Dialogues on Design: Notes on Doctoral Research in Design 2018*, Guerrini, L. and Volontè, P. (Editors), FrancoAngeli, Milan, Italy.

Sanders, L. (2017) Exploring Personal and Collective Futures, *My Futures*, Delft University Press, pp.16-38.

Sanders, E.B.-N. (2016) Where Are We Going? An Aspirational Map. In Joost, G., Bredies, K., Christensen, M., Conradi, F. and Unteidig, A. (Eds.) *Design as Research: Positions, Arguments, Perspectives*, Birkhäuser Basel.

Sanders, E.B.-N. and Stappers, P.J. Co-creation and the new landscapes of design (first published in *CoDesign*, 2008) will be reprinted in *Design: Critical and Primary Sources* by Bloomsbury Publishing, edited by Daniel Huppatz and published as a set of 4 reprinted hardback volumes in September 2015.

Sanders, E.B.-N. (2015) Is sustainable innovation an oxymoron? In *Changing Paradigms: Designing for a Sustainable Future*, P. Stebbing and U. Tischner (Eds.), Birkhäuser Publishers (BIRD Series). (Invited chapter)

Sanders, E.B.-N. (2015) A toolbox for collectively creative spaces, In Daam, H. (Ed.), *Moving Stories*, a publication of the Design Academy Eindhoven. (Invited chapter)

Sanders, E.B.-N. (2014) Co-designing can seed the landscape for radical innovation and sustainable change. In *The Highways and Byways to Radical Innovation – Design Perspectives*, Poul Rind Christensen & Sabine Junginger (Editors). (Invited)

Sanders, Elizabeth B.-N. (2013) Perspectives on Design in Participation. *Wer Gestaltet die Gestaltung? Praxis, Theorie und Geschichte des Partizipatorischen Designs*, Mareis, C., Held, M. and Joost, G. (Hg.), Verlag.

Sanders, E.B.-N. (2013) "Prototyping for the Design Spaces of the Future." In Valentine, L. (Editor) *Prototype: Design and Craft in the 21st Century*, Bloomsbury.

Sanders, E.B.-N. (2012) Creativity in Strategic Thinking, In Wolters, H.M.K., Grome, A. and Hinds, R. (Eds.) *Enhancing the Army's Strategic Thinking Capability: Insights to Assess, Develop, and Retain Strategic Thinkers*. Research Report for U.S. Army Research Institute for the Behavioral and Social Sciences.

Brandt, E., Binder, T. and Sanders, E.B.-N. (2012) Tools and Techniques: Ways to Engage Telling, Making and Enacting. In *Handbook of Participatory Design*. Routledge.

Sanders, E.B.-N. (2010) Stepping Stones Across the Gap: Explorations in the Generative Design Space. In Halse, J., Brandt, E., Clark, B., and Binder, T. (Eds.) *Rehearsing the Future*. The Danish Design School Press, 2010.

Sanders, E.B.-N. (2006) Scaffolds for Building Everyday Creativity. In *Design for Effective Communications: Creating Contexts for Clarity and Meaning*. Jorge Frascara (Ed.) Allworth Press, New York, New York.

Sanders, E.B.-N. (2002) Scaffolds for Experiencing in the New Design Space. In *Information Design*, Institute for Information Design Japan (Editors), IID.J, Graphic-Sha Publishing Co., Ltd. (In Japanese)

Sanders, E.B.-N. (2002) From User-Centered to Participatory Design Approaches. In *Design and the Social Sciences*. J. Frascara (Ed.), Taylor and Francis, Books Limited.

Sanders, E.B.-N. and William, C.T. (2001) Harnessing People's Creativity: Ideation and Expression through Visual Communication. In Langford, J. and McDonagh-Philp, D. (Eds.)

Focus Groups: Supporting Effective Product Development, Taylor and Francis.

Sanders, E.B.-N. (2000) Generative Tools for CoDesigning in *Collaborative Design*, Scrivener, Ball and Woodcock (Eds.) Springer-Verlag, London.

Russell, S., Sanders, E.B.-N. and Zwelling, S. (1996) Re-Creating the School Lunch Kit: Research in Universal Product Design. In *Universal Design: Creative Solutions for ADA Compliance*. Roberta L. Null, PhD with Kenneth F. Cherry, Professional Publications, Inc., pp. 115-120.

Russell, S. and Sanders, E.B.-N. (1996) The Role of User Research in Consumer Product Development. In *Handbook of Human Factors Testing and Evaluation*. Lawrence Erlbaum Associates, Publishers, pp. 267-273.

Papers in journals and conference proceedings

Craddock, K.A., Quinlan, L.R., Finucane, F.M., Gainforth, H.L., Ginis, K.A.M., Sanders, E.B.-N. and ÓLaighin, G. (2022) *Design of a planner-based intervention to facilitate diet behavior change in Type 2 Diabetes*. *Sensors*, Volume 22, Issue 7.

Sanders, E.B.-N., Murteza, N.D. and Sabatelli, M. (2022). *Pizza and poop: Using playful probes to investigate community in semi-public restrooms on a university campus*. *Architecture* 2 (1), 95-113.

Nickley, W., McInroy, L. B., Sanders, E. B.-N., Snyder, C., Sheadler, T. (2022, June 20–22). *Toward affirmative co-design: Accounting for intersectionality in LGBTQ+ youth identity & lived experience*, 8th International Forum of Design as a Process: Disrupting Geographies in the Design World. Bologña. <https://www.forumdesignprocess.org/dgdw22/>

Kevin A. Craddock, Leo R. Quinlan, Francis M. Finucane, Heather L. Gainforth, Kathleen A. Martin Ginis, Ana Correia de Barros, Elizabeth Sanders, Gearóid ÓLaighin (2021) *Identifying Barriers & Facilitators to Diet and Physical Activity Behaviour Change in Type 2 Diabetes using a Design Probe Methodology*. *The Journal of Personalized Medicine*, Volume 112, Issue 2, 10.3390/jpm11020072

Drain, A.R. and Sanders, E.B.-N. (2019) *A collaboration system model for planning and evaluating participatory design projects*, *International Journal of Design*, Volume 13, No. 3.

Drain, A. and Sanders, L. (2019) *A new way of thinking about collaboration during participatory design projects*, *Engineering for Change* (online) <https://www.engineeringforchange.org/news/new-way-thinking-collaboration-participatory-design-projects/>

Yu, S. and Sanders, E. B.-N. (2019) *An interdisciplinary methodology for facilitating growth mindsets of creativity for college students: Gameplay, co-design and group dynamics*, IASDR 2019: DESIGN REVOLUTIONS, Manchester School of Art, Manchester Metropolitan University, September 2 – 5, 2019.

Lavender, S. A., Sommerich, C. A., Sanders, E. B.-N., Evans, K. E., Li, J., Radin Umar, R. Z. and Patterson, E. S. (2019), *Developing Evidence-based Design Guidelines for Med/surg Hospital Patient Rooms that Meet the Needs of Staff, Patients, and Visitors*, HERD: Health Environments Research & Design Journal, First published June 13, 2019.
Epub available: <https://doi.org/10.1177/1937586719856009>

Evans, Kevin D., Carolyn M. Sommerich, Elizabeth B.-N. Sanders, Emily S. Patterson, Jing Li and Steven A. Lavender, *Opportunities for Inpatient Room Designs that Facilitate Imaging Professionals in Providing Diagnostic Patient Care: A Mixed Methods Study*, *Journal of Diagnostic Medical Sonography*, 2018, Vol.34(5), 329-340.

Sommerich, Carolyn M., Kevin D. Evans, Steven A. Lavender, Elizabeth Sanders, Sharon Joines, Sabrina Lamar, Radin Zaid Radin Umar, Wei-Ting Yen, and SangHyun Park. (2018) *Collaborating With Sonographers and Vascular Technologists to Develop Ergonomics Interventions to Address Work-Related Musculoskeletal Disorders*, Journal of Diagnostic Medical Sonography, (November 2018). doi:10.1177/8756479318810710.

Elizabeth B.-N. Sanders (2018) *A Generative Toolbox for Social Innovation*, Current 08, 2018. <http://current.ecuad.ca/author/elizabeth-sanders>

Sapna Singh, Nicole Lotz and Elizabeth B.-N. Sanders (2018) *Envisioning Futures of Design Education: An Exploratory Workshop with Design Educators*, Dialectic Issue 3.

Michael F. Rayo, Chandni Pawar, Elizabeth B.-N. Sanders, Beth W. Liston, and Emily S. Patterson (2018) *Participatory Bullseye Toolkit Interview: Identifying Physicians' Relative Prioritization of Decision Factors When Ordering Radiologic Imaging in a Hospital Setting*, Proceedings of the 2018 International Symposium on Human Factors and Ergonomics in Health Care. <https://doi.org/10.1177/2327857918071001>

Steven Lavender, Carolyn Sommerich, Elizabeth Sanders, Kevin Evans, Jing Li, and Emily Patterson (2018) *Developing Evidence-Based Ergonomics Guidelines for Med/Surg Patient Room Design to Meet the Needs of All Occupational Stakeholders, Patients, and Visitors*. Human Factors and Ergonomics in Healthcare: March 26-28, 2018, Marriott Copley Place, Boston MA.

Carolyn Sommerich, Steven Lavender, Kevin Evans, and Elizabeth Sanders (2018) *Outpatient Clinic Patient Exam Room - Provider Preferences*. Human Factors and Ergonomics in Healthcare: March 26-28, 2018, Marriott Copley Place, Boston MA.

Radin Zaid Radin Umar, Carolyn M. Sommerich, Steve A. Lavender, Elizabeth Sanders & Kevin D. Evans (2018) *Conceptual Frameworks for the Workplace Change Adoption Process: Elements Integration from Decision Making and Learning Cycle Process*, Ergonomics, Published online June 26, 2018.

Mike Rayo, Chandni Pawar, Elizabeth Sanders, Beth Liston, and Emily Patterson. (2018) *Decision-Making for Alternative Procedures: Navigating the Tradeoffs Between Clinical Effectiveness, Patient Safety, Financial and Organizational Pressures, and Patient Comfort*. Human Factors and Ergonomics in Healthcare: March 26-28, 2018, Marriott Copley Place, Boston MA.

Emily Patterson, Steve Lavender, Carolyn Sommerich, Kevin Evans and Elizabeth B.-N. Sanders, (2018) *"A Grounded Theoretical Analysis of Room Elements Desired by Family Members and Visitors of Hospitalized Patients: Implications for the Modern Hospital Patient Room*, Health Environments Research & Design Journal.

Lapolla, K. and Sanders, E.B.-N. (2017) *Encouraging More Efficient Wardrobes Through Recirculation of Idle Apparel*. Clothing Cultures, Volume 4, Number 1.

Sanders, E.B.-N (2017), *Design Research at the Crossroads of Education and Practice*, She Ji: The Journal of Design, Economics, and Innovation, Volume 3, Issue 1, pp. 3-15. <http://www.sciencedirect.com/science/article/pii/S2405872616300636>

C.M. Sommerich, S. A. Lavender, K. D. Evans, E. Sanders, S. Joines, S. Lamar, R. Z. R. Umar, W.-T. Yen and S. H. Park. *Collaborating with Mammographers to Address Their Work-Related Musculoskeletal Discomfort*. Ergonomics, 2016.

Muljono, D., McKenzie, D. and Sanders, E.B.-N. (2016) *Collective Dreaming in the Virtual World: The First Step*, Proceedings of the RSD5 Symposium, Toronto, 2016.

Sommerich, C.M., Pires, A.S., Lavender, S.A., Sanders, E. B.-N., Evans, K.D., Li, J. Patterson, E. (2016). *Architects' and Interior Designers' Perspectives on Hospital Patient Rooms Designed by the People Who Work in These Rooms*. Proceedings of the Human Factors and Ergonomics Society 2016 Annual Meeting, pg 588-592.

Yen, W.-T., Sommerich, C.M., Lavendar, S.A., Flinn, S.R. and Sanders, E.B.-N. (2016) *Evaluation of jar lid design characteristics by older women with hand use limitations*, *Applied Ergonomics*, 52 (2016) 177-184.

Sommerich, C., Evans, K., Lavender, S., Sanders, E. B.-N., Joines, S., Umar, R., Yen, W.-T., Shesank, N. and Li, J. *Collaborating with cardiac sonographers to develop work-related musculoskeletal disorder interventions*. *Ergonomics*, 2016.

Lapolla, K. & Sanders, E.B.-N. (2015) *Using co-creation to engage everyday creativity in reusing and repairing apparel*, *Clothing and Textiles Research Journal*. Special Issue on Creative Thinking and Problem Solving, Volume 33, Issue 3.

Bennett, K. and Sanders, E. (2015) *Specialized research courses for design undergraduates*. *Innovation Quarterly Journal* (The Journal of the Industrial Designers Society of America). (Invited article)

Sanders, E. B.-N. (2015) *The fabric of design wisdom*, *Designing Wisdom: Prospects, Practices and Provocations* (the 6th edition of *Current*, a publication of the Emily Carr University of Art and Design). (<http://current.ecuad.ca>) (Invited article)

Lavender, S.A., Sommerich, C.M., Sanders, E.B.-N., Evans, K.D., Li, J., Umar, R.Z.R., Nagavarapu, S., Patterson, E.S. (2015) *Med/Surg patient room layouts identified through a participatory design process with hospital staff*. *Proceedings of the International Ergonomics Association*, #605.

S. Lavender, C. Sommerich, E. Sanders, K. Evans, J. Li, R.Z.D. Umar, S. Nagavarapu, and E. Patterson, *eyebrow-raising patient room design concepts desired by hospital staff*, *HFES 2015: Human Factors and Ergonomics in Healthcare: Improving the Outcomes*.

C. Sommerich, S. Lavender, E. Sanders, K. Evans, E. Patterson, R.Z.D. Umar, J. Li, S. Park, S. Nagavarapu, and J. Murray, *The room I want to work in: Patient room design by hospital staff*, *HFES 2015: Human Factors and Ergonomics in Healthcare: Improving the Outcomes*.

E. Patterson, J. Murray, S. Lavender, C. Sommerich, K. Evans, E. Sanders, and J. Li. *Communication in the hospital room: A goal-means decomposition model*, *HFES 2015: Human Factors and Ergonomics in Healthcare: Improving the Outcomes*, HPRD Panel.

S. Lavender, C. Sommerich, E. Sanders, K. Evans, J. Li, R.Z.D. Umar and E. Patterson, *Patient room design: The environmental services perspective*. Poster session at 2015 Healthcare Design Conference—Educational Session November 14-17, 2015, Gaylord National Resort & Convention Center. Washington, DC.

Rayo, M.F., Kowalczyk, N., Liston, B.W., Sanders, E.B.-N., White, S. and Patterson, E.S. (2015) *Using visual analytics to support decision-making in high complexity and uncertainty situations*, *Translational Data Analytics Fall Forum*, The Ohio State University.

Lavender S., Sommerich C., Sanders, E.B.-N., Patterson E.S., Evans K., Park S., Li J., Umar R. (2015) *Hospital patient room design: Understanding the issues facing 23 occupational groups who work in medical/surgical patient rooms*, *Health Environments Research & Design Journal*.

Rayo, M.F., Kowalczyk, N., Liston, B.W., Sanders, E.B.-N., White, S. and Patterson, E.S. (2015) *Comparing the effectiveness of alerts and dynamically annotated visualizations (DAVs) in improving clinical decision making*. *Human Factors: The Journal of the Human Factors and Ergonomics Society*.

Sanders, E.B.-N. and Stappers, P.J. (2014) *Probes, toolkits and prototypes: Three approaches to making in co-designing*. In *CoDesign: International Journal of CoCreation in Design and the Arts*. Special Issue on Making.

Sanders, L. and Stappers, P.J. (2014) *From designing to co-designing to collective dreaming: Three slices in time*. ACM Interactions. <http://interactions.acm.org/about>

Lavender, S., Sommerich, C., Sanders, E., Patterson, E., Evans, K., Park, S., Radin Umar, R. Z., Li, J. and Davis, R. (2014) Designing hospital patient rooms to meet the ergonomic needs of occupational stakeholders. *2014 International Symposium on Human Factors and Ergonomics in Health Care: Leading The Way*, Chicago.

Patterson, E. S., Murray, J., Park, S., Sanders, E.B.-N., Li, J., Umar, R., Sommerich, C. M., Evans, K. D. and Lavender, S. A. (2014) Barriers to infection control due to hospital patient room factors: A secondary analysis of focus group and interview transcripts, *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, Volume 58, Issue 1, Pages 1266-1270.

Doustmohammadi, S., Valamanesh, R. and Sanders, E. (2014) Meaning-driven customization: A bio-inspired approach to the customization. *IDSA Education Symposium 2014*, August 13, 2014, Austin.

Sanders, L. (2013) New Spaces, Places and Materials for Co-Designing Sustainable Futures. *Current: Emily Carr University of Art + Design, Design Research Journal*, Issue 04, Spring.

Flinn, S., Sanders, E.B.-N., Yen, W.-T., Sommerich, C. and Lavender, S. (2013) Empowering elderly women with osteoarthritis through hands-on exploration of adaptive equipment concepts. *Occupational Therapy International*, 20(4).

Liem, A. and Sanders, E.B.-N. (2013) Human-centered design workshops in collaborative strategic design projects: An educational and professional comparison. *Design and Technology Education: An International Journal*, Volume 18:1.

Sommerich, CM, Lavender, SA, Sanders, E., Joines, S., Evans, K, Lamar, S., Yen W-T., Radin Umar, RZ (2013) Participatory Ergonomics Applied to radiographers' work, *HFES 2013 Symposium on Human Factors and Ergonomics in Health Care: Advancing the Cause*.

Yen, W.-T., Sommerich, C., Lavender, S., Flinn, S. and Sanders, E. (2013) Product physical interface design characteristics for older adults with hand use limitations: Laboratory study, *Proceedings of the 2013 Human Factors and Ergonomics Society Annual Meeting*.

Sanders, E.B.-N. (2013) Perspectives on Design in Participation. A shortened version of the original paper will be published in *GRID* (<http://www.grid-magazin.de>).

Leyva, C., Sanders, E.B.-N. and Privitera, M.B. (2013) Increasing Empathy in Designers, *IASDR 2013*.

Flinn, S., Yen, W.-T., Sommerich, C., Lavender, S. and Sanders, E.B.-N. (2013) Preference of Lid Design Characteristics by Older Adults with Limited Hand Function, *Journal of Hand Therapy*, Volume 26, Issue 3, July–September 2013, pages 261–271.

Hussain, S., Sanders, E. B.-N., & Steinert, M. (2012). Participatory Design with Marginalized People in Developing Countries: Challenges and Opportunities Experienced in a Field Study in Cambodia. *International Journal of Design*, 6(2), 91-109.

Hussain, S. and Sanders, E.B.-N. (2012) Fusion of Horizons: Co-designing with Cambodian Children who have Prosthetic Legs by Using Generative Design Tools. *CoDesign: International Journal of CoCreation in Design and the Arts*.1-37.

Yen, W., Sommerich, C., Lavender, S., Flinn, S., & Sanders, L., (2011). Product Physical Interface Design Characteristics for Older Adults with Hand Use Limitations: Exploration of Users' Experiences. *Proceedings of 55nd Annual Meeting of the Human Factors and*

Ergonomics Society, Las Vegas, NV, 182-186.

Umar, R.R., Sommerich, C., Evans, K., Lavender, S., Sanders, E., Yen, W., Joines, S., & Lamar, S. (2011). Ergonomic Interventional Design of an Articulating Arm for Echocardiography Application: Front-End Design and Pilot Study. *Proceedings of 55th Annual Meeting of the Human Factors and Ergonomics Society*, Las Vegas, NV, 980-983

Sommerich, C., Lavender, S., Sanders, E., Lamar, S., Evans, K., Joines, S., & Yen, W. (2011). Participatory Ergonomics Applied to Sonographers' Work. *Proceedings of 55th Annual Meeting of the Human Factors and Ergonomics Society*, Las Vegas, NV, 1067-1070

Sanders, E.B.-N., Brandt, E. and Binder, T. (2010). A framework for organizing the tools and techniques of participatory design. *PDC 2010*, Sydney.

Sommerich, C., Lavender, S., Sanders, E., Lamar, S., Evans, K., Joines, S., and Yen, W. (2010) Participatory Ergonomics Applied to Mammographers' Work. *The Human Factors and Ergonomics Society 54th Annual Meeting*, San Francisco.

Liu, D., Sommerich, C., Sanders, E. and Lavender, S. (2009) Application of a Participatory Methodology for Investigating Personal Fall Arrest System (PFAS) Usage in the Construction Industry. *The Human Factors and Ergonomics Society 53rd Annual Meeting*, San Antonio, 2009.

Sanders, L. and Simons, G (2009) A Social Vision for Value Co-creation in Design. *Open Source Business Resource*, December 2009. Available at <http://www.osbr.ca/ojs/index.php/osbr/article/view/1012/973>

Evensen, E., Chan, P.K., Sanders, E.B.-N. and Nini, P.J. (2009) Crafting a Design Concept Prototype for an Educational Game Design: A Case Study. *IASDR 2009: Rigor and Relevance in Design*, COEX, Seoul, Korea.

Sanders, E.B.-N. (2008) An Evolving Map of Design Practice and Design Research. *Interactions*, November/December, 2008.

Chan, P.K., Sanders, E.B.-N. and Evensen, E. (2008) Game Design for Personal Health Management: An Emotional and Educational Perspective. *Design + Emotion 2008: Dare to Desire*, Hong Kong Polytechnic University, Hong Kong.

Sanders, E.B.-N. and Stappers, P.J. (2008) Co-creation and the New Landscapes of Design. *CoDesign*, 4(1).

Ivey, M., and Sanders, E.B.-N., (2006) Designing a Physical Environment for Co-experience and Assessing Participant Use. *Wonderground 2006, The Design Research Society International Conference*.

Sanders, E.B.-N. (2006) Design Research in 2006. *Design Research Quarterly*, V.1:1, Design Research Society, September 2006.

Sanders, E.B.-N. (2006) Design Serving People. *Cumulus Working Papers: Copenhagen*. Publication Series G, University of Art and Design Helsinki.

Sanders, E.B.-N., (2005) Information, Inspiration and Co-creation. *Proceedings of the 6th International Conference of the European Academy of Design*, University of the Arts, Bremen, Germany.

Stappers, P.J. and Sanders, E. B.-N. (2005) Tools for Designers, Products for Users? The Role of Creative Design Techniques in a Squeezed-in Design Process. In Hsu, F. *Proceedings*

of the *International Conference on Planning and Design*, NCKU, Taiwan.

Sleeswijk Visser, F., Stappers, P.J., van der Lugt, R. and Sanders, E.B.N. (2005) Contextmapping: Experiences from Practice. *CoDesign*, 1(2).

Sanders, E.B.-N. (2004) *Ethnography and the Empowerment of Everyday People*. (Property of Microsoft Corporation)

Sanders, E.B.-N. (2003) Scaffolds for Building Everyday Creativity. In the online proceedings for *Creating Communicational Spaces: An International Conference Exploring Interpretation, Interaction, Negotiation and Culture in the Creation of Meaning*. Edmonton, Canada. <http://www.ualberta.ca/COMSPACE/>

Stappers, P.J. and Sanders, E.B.-N. (2003) Generative Tools for Contextmapping: Tuning the Tools. In McDonagh, D., Hekkert, P. In the *Proceedings of the 3rd International Conference on Design and Emotion*.

Sanders, E.B.-N. (2002) How 'Applied Ethnography' can Improve your NPD Research Process. In *Visions Magazine Special Section: Ethnography in NPD Research*, April.

Sanders, E.B.-N. (2001) Virtuosos of the Experience Domain. In *Proceedings of the 2001 IDSA Education Conference*.

Sanders, E.B.-N. (2001) A New Design Space. In *Proceedings of the ICSID 2001 Seoul: Exploring Emerging Design Paradigm*, Seoul, Korea.

Stone, B. R., Chung, W. C., Kasprzak, B. L. and Sanders, E.B.-N. (2001) User Research as the Primary Design Inspiration for Packaging and Branding Strategies. In *Proceedings of the 2001 IDSA Education Conference*.

Sanders, E.B.-N. (2001) Collective Creativity. In *LOOP: The AIGA Journal of Interaction Design Education*, Edition 3. www.loop.aiga.org

Sanders, E.B.-N. (1999) Postdesign and Participatory Culture. In *Proceedings of Useful and Critical: The Position of Research in Design*. (Helsinki: University of Art and Design), pp. 87-92.

Welker, K., Sanders, E.B.-N., and Couch, J. (1997). Design Scenarios. *Innovation*, Fall.

Sanders, E. (1997) Cognition and Emotion Bibliography. A project of the Graphic Design Education Association. American Center for Design, Chicago, Illinois.

Dandavate, U., Sanders, E.B.-N. and Stuart, S. (1996) Emotions Matter: User Empathy in the Product Development Process. *Proceedings of the Human Factors and Ergonomics Society*, 40th Annual Meeting.

Adams, E. and Sanders, E.B.-N. (1995) An Evaluation of the Fun Factor for the Microsoft Easy Ball Mouse. *Proceedings of the Human Factors and Ergonomics Society*, 39th Annual Meeting.

Roth, S.K. and Sanders, E.B.-N. (1994) The Classroom as Workplace. *Innovation*, Winter.

Sanders, E.B.-N. (1994) But Is It Useful? Testing Beyond Usability. *Innovation*, Spring.

Sanders, E.B.-N. (1993) Converging Perspectives in Product Development Research. *Proceedings of Interface '93*, Raleigh, North Carolina.

Sanders, E.B.-N. (1993) Product Development Research for the 1990s. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, Seattle, Washington.

Gage, M., Sanders, E.B.-N., and Welker, K. (1993) Ergonomic Product Development: A Participatory Approach. *Industrial Vehicle Technology*.

Sanders, E.B.-N. (1992) Converging Perspectives: Product Development Research for the 1990s. *Design Management Journal*, Fall.

Sanders, E.B.-N. (1992) Participatory Design Research in the Product Development Process. Workshop and paper from *PDC '92: Proceedings of the Participatory Design Conference*, Cambridge, Massachusetts.

Couch, J.S. and Sanders E.B.-N. (1991) Capturing the 'Look and Feel' of Diagnostic Medical Equipment. *Proceedings of Interface '91*, Dayton, Ohio.

Sanders, E.B.-N. (1987) Designing for People: Some Principles from Cognitive Psychology. *Proceedings of the 63rd Annual American Association of Zoological Parks and Aquariums*. Portland, Oregon.

Rheinfrank, J.J., Evenson, S.K., Kresge, K.J. & Sanders, E.B.-N. (1986) On the Semiology of Object, Space, and Behavior: The Design of Strategic Design Languages. *Proceedings of the Human Factors Society 30th Meeting*, Dayton, Ohio, Human Factors Society.

Sanders, E.B.-N. (1986) Toward a Theory of Information Design. *Proceedings of the Human Factors Society 30th Annual Meeting*, Dayton, Ohio, Human Factors Society.

Rheinfrank, J. J., Sanders, E.B.-N., Mangold, S.J., Kresge, K.J., Teufel, R.B. and Evenson, S.K. (1985) Principles for Constructing Communicative Objects and Object Systems as Interactive Dialogs. RichardsonSmith Inc., (property of Xerox Corporation).

Sanders, E.B.-N. (1981) The Effect of Verbal Ability on the Efficiency of Interpreting Verbal and Pictorial Stimuli. Doctoral dissertation, The Ohio State University, Columbus, Ohio.

Shulman, H.G., Hornak, R., & Sanders, E.B.-N. (1978) The Effects of Graphemic, Phonetic, and Semantic Relationships on Access to Lexical Structures. *Memory & Cognition*, 6, pp. 115-124.

PRESENTATIONS AND WORKSHOPS

Invited keynotes, presentations and workshops

Invited virtual presentation: *Co-designing in 2021 - Transformation in Methods and Tools*, for IxDA (Interaction Design Association), Oslo on February 10, 2021.

Invited virtual presentation, "From designing to co-designing to collective dreaming" at Ernst & Young's *Internal Creativity and Innovation Conference* on April 21, 2021.

Co-designing in 2021 - Transformation in Methods and Tools, at the CCSDI (Cluster for Co-Creative Service Design) internal seminar on June 3, 2021.

Keynote speaker for an online webinar on November 29, 2021 that was sponsored by the Centre for Excellence in Universal Design. The webinar title was "A Universal Design for All Approach: Methods for a Culture of Co-Design."

Invited public lecture, *From Designing to Co-designing to Collective Dreaming*, for McEwan University on March 11, 2020. This event was planned to be part of a three day visit to Edmonton, Alberta, Canada but the public lecture was moved to an online format a week later due to Covid-19.

Invited Main Stage speaker for the IDSA Deep Dive Conference, *Women in Design 2020*, on October 6, 2020. This event moved from an earlier date to an online format during Covid-19.

Sanders, E. B.-N., Braun, E. and Singh, S. (2019) *Mapping Opportunities for Collective Engagement: A Hands-on Workshop*. An interactive workshop session at the 2019 Community Engagement Conference at OSU on January 23, 2019.

Invited keynote, *Why is co-creation needed for service design in healthcare?*, at the Cluster for Co-Creative Service Design and Innovation (CCSDI) conference on June 5, 2019 in Oslo Norway. <https://www.ccsdi.no/enkeltinnlegg/2019/06/28/Presentasjoner-fra-den-første-CCSDI-konferanse-Tjenestedesign-i-helse-5-juni-2019>

Invited keynote, *Universal Co-Design*, for UDHEIT 2018 (Universal Design and Higher Education in Transformation) in Dublin, Ireland from October 30 to November 2, 2018. <https://www.udheit2018.com>

Invited workshop called *Design for All or Design with All? A Hands-on Workshop* at UDHEIT 2018 (Universal Design and Higher Education in Transformation) on October 31, 2018. <https://www.udheit2018.com>

Invited keynote presentation, *Exploring Personal and Collective Futures*, at the *My Futures Symposium* at TU Delft in The Netherlands, Friday January 27, 2017. <http://studiolab.ide.tudelft.nl/studiolab/myfutures/team-and-partners/>

Invited keynote, *Co-design: Objectives and Strategies*, *The New Zealand Health Design Council Conference* in Auckland NZ on August 8, 2017.

Public presentation at the invitation of Design West Michigan called *New Spaces for Co-Design* at Kendall College of Art and Design on November 10, 2017.

Keynote speaker, *Delivering on People's Needs and Dreams through Co-creative Design in Health Care*, *Innovasjonskonferansen 2017: Samskaping*, 23 of November at the Scandic Hell, in Norway.

Lavender, S., Sommerich, C., Sanders, E., Evans, K., Li, J., Radin Umar, R.Z. and Patterson, E. (2017) Evidence-Based Ergonomics Guidelines For Med/Surg Patient Room Design: Accommodating the Workplace Needs of Hospital Staff While Also Meeting the Needs of Patients, their Families, and their Visitors. Presentation made at *HCD: Healthcare Design Expo and Conference*, November 11-14, Kissimmee Florida.

Invited presentation, *Co-Design in Health and Care*, at *Cluster for Co-creative Service Design and Innovation* in Trondheim, Norway, November 23, 2017.

Sanders, E.B.-N., *Imagining a Co-design Space for Systems*, at the RSD5 Symposium: Systemic Design for Social Complexity in Toronto CA on October 13-15, 2016. (Invited keynote presentation)

Sanders, E.B.-N., *DRAW: Designing, Reading, Arithmetic and Writing*. Catalyst presentation for a "Conversation" at the Design Research Society Conference in Brighton UK, June 27 to 30, 2016.

Invited speaker at *West Michigan Design Week* on April 10, 2015. Presented *From Designing to Co-Designing to Collective Dreaming*.

Keynote panel presenter for the *IDSA 50th Anniversary Conference in Seattle: The Future of the Future*. Seattle, WA, August 19-22, 2015.

Presented "Designing with people" at *Alleviating Poverty Through Entrepreneurship Summit*, March 22 2014 at the Wexner Center for the Arts, Columbus, OH. (Invited presentation)

Sanders, E. B.-N. (2104) *Co-designing through making, telling and enacting*, *Synergize2014 Conference: Making Collaborative Research Happen*, Lancaster, UK. (Invited keynote)

Presented "Design Research in 2014: A New Map" at *CONNECTING DOTS*, an AIGA Design Educator's conference that took place at the University Of Cincinnati on March 14 and 15. (Invited presentation)

Sanders, E.B.-N. (2014) *From Designing to Co-designing* on December 17th at the International Design Liaison Center, Tokyo MidTown Design Hub. It was hosted by Daishinsha Inc. and Diamond Inc. in cooperation with JIDP (Japan Institute of Design Promotion). Invited public address. (Invited presentation)

Keynote speaker, *Collective Creativity through Making, Hacking and Enacting*, at Design Fusion at C-Mine Genk, Genk, Belgium, December, 2013.

Presented *Design Research in 2013: A New Map* at the mini-symposium on Exploring Early Design Concepts with Users, Filmzaal, de Zwarte Doos, TU/e, Eindhoven, NL on October 14, 2013.

Presented *Collective Innovation* at the 2013 Design Research Conference, Exploring Creative Balance in Design, Chicago, October 8-9, 2013.

Invited to speak and conduct a workshop at Sustainable Technologies and Transdisciplinary Futures: From Collaborative Design to Digital Fabrication, STTF2013 Summer School, ISCTE-IUL University Institute of Lisbon, July 8-12, 2013.

Keynote speaker at the Motorola Consumer eXperience Design Summit, Schaumburg, Illinois on February 2, 2012.

Conducted a MasterClass and Workshop on *Co-creation and Co-Design* for the H2I institute in Madrid, Spain on March 13 and 14, 2012.

Presentation about co-designing at Designit in Madrid, Spain on March 15, 2012.

Participation in an interdisciplinary course, *Representing Disabilities*, sponsored by the Institute for Visual Studies Seminar at James Madison University in Harrisonburg, Virginia during the Winter Semester, 2012.

Invited to present *Design Serving People* at the Milano Design PhD Festival in Milan, Italy on March 16, 2012.

Presented *New Spaces for Collective Creativity* at TU Delft's Industrial Design Engineering Symposium: THE USER IS NOT ALONE in Delft, The Netherlands on September 25, 2012.

Presented *Design Serving People: Innovation through Co-creation* at the Segal Seminar Series at Northwestern University in Evanston, Illinois. October 8, 2012.

Presented *How Will We Stir Things Up?* at the Stir Symposium: Learning, Conserving, Eating, Moving and Living, October 7-9th, 2011 at The Ohio State University.

Presented *Designing and Co-designing* and conducted a participatory design workshop at North Carolina State University on November 11, 2011 at the invitation of Sharon Joines, PhD, Assistant Professor, Graphic Design and Industrial Design Department, CUD | RED Lab, College of Design, North Carolina State University

Presented *Perspectives on Participation in Design* at DGTF (Deutsche Gesellschaft für Designtheorie und -forschung) - German Society for Design Theory and Research's annual conference on October 21 and 22, 2011 at Hochschule für Gestaltung HfG Schwäbisch Gmünd.

Sanders, E.B.-N. (2010) *Prototyping for the Design Spaces of the Future*. Invited keynote paper at the International symposium, Prototype - Craft in the Future Tense, co-convened by the Victoria and Albert Museum, London and Duncan of Jordanstone College of Art & Design, the University of Dundee, Scotland, June 10-11, 2010.

Sanders, E.B.-N. (2010) Sustainable Innovation through Participatory Prototyping. Invited Conversation Catalyst at *EXPOSED 2010*, April 7-10 in Phoenix, Arizona.

Sanders, E.B.-N. (2009) Co-creation through Generative Design Thinking. Invited keynote for *IASDR (International Association of Societies of Design Research)*, Seoul, Korea.

Sanders, E.B.-N. (2009) Exploring Co-creation on a Large Scale: Designing for New Healthcare Environments and Experiences. Invited keynote for *Symposium: Designing for, with and from User Experiences*, May 13, 2009, Faculty of Industrial Design Engineering, Delft University of Technology in Delft, The Netherlands.

Sanders, E.B.-N. (2008) Co-creation and the New Landscapes of Design. Invited presentation for the *Design Research Conference*, Chicago, September 18-20.

Sanders, E.B.-N. (2008) Co-creatie en participatory design. Invited presentation at *FIFI 2008 (Fear it? Fix it!)* Amsterdam, The Netherlands, November 27-28.

Sanders, E.B.-N. (2007) Designing with Your Users: Generative Tools for Collective Creativity. Invited keynote at *Adaptive Path's User Experience Week 2007* August 13-16, 2007 Washington, D.C.

Sanders, E.B.-N. (2005) Invited to lead the *SCAD 2005 Design Charrette* at the Savannah College of Art and Design in Savannah, Georgia.

Sanders, E.B.-N. (2005) Design Serving People. Invited presentation for *Cumulus 2005: Conference on Future Design & Innovation*. Danmarks Designskole, Copenhagen, Denmark.

Sanders, E.B.-N. (2004) Information, Inspiration and Co-Creation. Keynote speaker at *About, With and For Conference: Advancing the Practice of Design Research*, Chicago, IL

Sanders, E.B.-N. (2003) Rethinking Research for Human-Centered Designing. Invited presentation at the *IDSA Mideast Conference* in Cincinnati, Ohio.

Sanders, E.B.-N. (2002) Invited panel member on the Research, Analysis and Design Panel at *CHI2002/AIGI Experience Design Forum* in Minneapolis, MN.

Sanders, E.B.-N. (2002) Invited presentation and a participatory workshop at the annual *Design Management Institute Conference* at Cape Cod, MA.

Sanders, E.B.-N. (2002) Invited speaker for *Creating Communicational Spaces: An International Conference Exploring Interpretation, Interaction, Negotiation and Culture in the Creation of Meaning*. Edmonton, Canada.

Sanders, E.B.-N. (2002) Participatory Designing: Information and Adaptation. Invited speaker for *2 byTwo: Preparing for the Future of Knowledge Representation*, ID IIT, Chicago, IL.

Sanders, E.B.-N. (2001) Opening the Design Process: Everyday People in the Fuzzy Front End. Stanford University. Invited speaker at Terry Winograd's Seminar on People, Computers and Design.

Sanders, E.B.-N. (2001) A New Design Space. Invited presentation at *ICSID 2001* in Seoul, Korea.

Sanders, E.B.-N. (2000) Human-Centered Design. Invited presentation at the *User-Centered Design Seminar and Workshop*, Hong Kong.

Sanders, E. B.-N. (1999) Expanding the Scope of Information Design: From Information to Experience. Invited presentation at the *Visionplus7 Conference* in Tokyo, Japan.

Sanders, E.B.-N. (1999) Postdesign and Participatory Culture. Invited keynote presentation at *Useful and Critical: The Position of Research in Design*. University of Art and Design. Helsinki, Finland.

Sanders, E.B.-N. (1999) Design for Experiencing: New Tools. Invited presentation at the Design and Emotion Conference in Delft, The Netherlands.

Additional conference presentations

Nickley, W., Snyder, C., McInroy, L. B., Sanders, E. B.-N., Sheadler, T. (2022, June 25–July 3). Affirmation excursion: Moving beyond surveys to make space for your stakeholders' identities [Conference workshop]. *DRS 2022*, Universidad del País Vasco. Bilbao. <https://www.drs2022.org/>

Shen, Y. and Sanders, L., *Visualizing Stress: In-person and virtual co-designing with chart-based tools*, IASDR 2021, The Hong Kong Polytechnic University, December 5-9, 2021.

Maguire, L., Vasquez, D. E., Haney., A., Byrd, C. and Sanders, E. B.-N. (2019) *Transdisciplinary Co-Design to Envision the Needs of the ICU of the Future*, a poster presentation at HFES 2019 (International Symposium on Human Factors and Ergonomics in Health Care) in Chicago, IL on March 26, 2019.

Sommerich, C., Lavender, S., Evans, K., and Sanders, E. *Clinic patient rooming workflow: Better practices for better staff and patient experiences*, a poster presentation at HFES 2019 (International Symposium on Human Factors and Ergonomics in Health Care) in Chicago, IL on March 26, 2019.

Sanders, E.B.-N and Singh, S., Bridging Design Academia and Practice: Collaborative Visioning Workshop at the *Design Management Academy 2017 Conference* in Hong Kong on June 8th.

McKenzie, D., Muljono, D. and Sanders, E.B.-N., *Collective Dreaming in a Virtual World: The First Step*, RSD5 Symposium: Systemic Design for Social Complexity, Toronto CA on October 13-15, 2016.

Participation on the Futurist Panel at the *GD50 Symposium* at The University of the Arts on September 24, 2016 in Philadelphia, PA.

Presentation called *Collective Dreaming* at a symposium, *Co-weaving our University Dreams*, at Wright State University in Dayton, Ohio on May 26, 2016.

Lavender S., Sommerich C., Sanders, E.B.-N., Early stage designs for med-surg patient rooms, *2015 Healthcare Design Conference—Educational Session* November 14-17, 2015, Gaylord National Resort & Convention Center. Washington, DC.

Sanders, E.B.-N. and Beck, J. (2008) Human-Centered Innovation in the Planning Process. *Healthcare Design 08*, Washington DC, November 9-11.

Sanders, E.B.-N. (2005) Healing Experiences. Presented at *Healthcare Building Expo*. Baltimore, Maryland.

Parris, R.D., Sanders, E.B.-N. and Patton, S.W (2005) Collaboration through Co-Creation. Presented at the *Society for College and University Planning* 2005 North Central Regional Conference, The Ohio State University, Columbus, Ohio.

- Sanders, E.B.-N. (2002) Participated in a hands-on conference called *HearSay: 10 Conversations on Design* at the University of the Arts in Philadelphia, PA.
- Sanders, E.B.-N. (2002) Rethinking Research for Human-centered Designing. at the *IDSA Mideast Conference*, Cincinnati, OH.
- Sanders, E.B.-N. (2000) Generative Tools for Accessing Experience. A workshop that took place at *PDC 2000: The Participatory Design Conference*, November, 2000, New York, NY.
- Chan, K. and Sanders, E.B.-N. (1998) What is the Value of a PhD Degree in Design? *The Doctoral Education in Design Conference at The Ohio State University*. October, 1998.
- Sanders, E.B.-N. (1998) Converging Perspectives: A Framework and Workshop. Innovations in Marketing Research. Fall Conference of the *Medical Surgical Marketing Research Group*. Orlando, Florida, October, 1998.
- Sanders, E.B.-N. and Branaghan, R. J. (1998) Participatory Expression through Image Collaging: A Learning- by-Doing Experience. A workshop conducted at *PDC '98: The Participatory Design Conference*, November, 1998.
- Sanders, E.B.-N. and Adams, E. (1997) User Research Methods in Product Development: A Participatory Session for Practitioners. *The Human Factors and Ergonomics Society 41th Annual Meeting*, Albuquerque.
- Sanders, E.B.-N., Dandavate, U. and Stuart, S. (1996) Emotions Matter: User Empathy in the Product Development Process. Presented at *IDSA (Industrial Designer's Society of America) Annual Meeting*, Orlando, Florida.
- Sanders, E.B.-N. (1996) New Space. Presented at *IDSA (Industrial Designer's Society of America) Regional Meeting*, Columbus, Ohio.
- Sanders, E.B.-N. (1996) Emergent Pathways Under Construction. Paper presented at "design@2006.information.edu." *National Science Foundation Workshop*, Raleigh, N.C.
- Sanders, E.B.-N. and Davidson, M. (1996) An In-Depth Look at a Participatory Design Method: Projective Expression through Image Collages. A workshop conducted at *PDC '96: The Participatory Design Conference*, November, 1996.
- Sanders, E.B.-N. (1994) Velcro-Modeling and Projective Expression: Participatory Design Methods for Product Development. A workshop conducted at *PDC '94: The Participatory Design Conference*, October 1994.
- Sanders, E.B.-N. (1993 May) Human Factors in the Product Development Process. Seminar presented at the *Baxter Healthcare Corporation's Science and Technology Conference*, Chicago, Illinois.
- Sanders, E.B.-N. (1993) The Future of Human Factors. Presented at *IDSA (Industrial Designers' Society of America). Annual Meeting*, Atlanta, Georgia.
- Sanders, E.B.-N. and Gresham, D. (1993) The Lunch Box Case Study. Presented at *IDSA's Conference on Design Education*, Atlanta, Georgia.
- Sanders, E.B.-N. and Zwelling, S. (1993 November) *User-Centered Research in the Universal Design Process*. Presented at *The Miami University Universal Design Education Project*, Oxford, Ohio.

Sanders, E.B.-N. (1991 June) Meeting the Needs of Multiple Users: Research Techniques and Design Approaches. Paper presented at *Medical Design and Manufacturing East '91 Conference*, New York, New York.

Sanders, E.B.-N. (1988 January) Designing for People: Some Principles from Cognitive Psychology. Paper presented at The Dallas Zoo, Dallas, Texas.

Sanders, E.B.-N. (1988 April) Communication Design: Visual/verbal Problem Solving. Paper presented at *TechniCom '88 for The Society for Technical Communication*, Cleveland, Ohio.

Sanders, E.B.-N. (1987 March) Cognitive Psychology and Design: User-centered Design Principles. Paper presented at *Spring 1987 Lecture Series, Rhode Island School of Design*, Providence, Rhode Island.

Sanders, E.B.-N. (1986 October) Information Design Principles. Paper presented at *TechniCom '86 for The Society for Technical Communication*, Cleveland, Ohio.

Sanders, E.B.-N. & Evenson, S.K. (1986 October) Information Design Principles: Ways to Use Them. Workshop presented at the *Society for Typographic Artists Fall Conference*, Chicago, Illinois.

Sanders, E.B.-N. (1986 December) The Development of a Set of Design Principles. Paper presented at *Information Design Conference 3*, University of Warwick, England.

Amodeo, R.G. & Sanders, E.B.-N. (1986 December) Case Studies of Information Design: Packaging and Merchandising. Paper presented at *Information Design Conference 3*, University of Warwick, England.

Wilkin, L. & Sanders, E.B.-N. (1986, December) A Tool for Designing and Evaluating Information Systems in Retail Environments. Paper presented at *Information Design Conference 3*, University of Warwick, England.

Sanders, E.B.-N. & Shulman, H.G. (1979 May) The Effect of Visual Similarity on Orthographic Codes. Paper presented at the *Midwestern Psychological Association Meeting*, Chicago, Illinois.

Webinar

Sanders, L. (2010) Co-creation strategies for breakthrough innovation. Intervista, Innovation Cultures, WebLecture Series.

EDITORSHIP AND SERVICE AS A PAPER REVIEWER

Associate Editor for *Ergonomics in Design*, the journal published by The Human Factors and Ergonomics Society (HFES) since 2015.

Guest Editor with Pieter Jan Stappers for a Special issue: CODESIGNING THROUGH MAKING for *CoDesign: International Journal of CoCreation in Design and the Arts*, in press for 2014.

Associate Editor Of *CoDesign: International Journal of CoCreation in Design and the Arts* since 2005.

International Scientific Review Committee for the upcoming DMI 19th Academic Design Management Conference (DMI: ADMC 2014)

Programme Committee Member for the *Participatory Design Conference*

Review committee member for *Digital Creativity* since 2012.

Review committee member for *NORDCHI (the Nordic Conference on Human-Computer Interaction)* since 2010.

Review committee member for *International Journal of Design* since 2007.

Review committee member for *Computer Human Interaction Conferences* since 2000.

Review committee member for *CHI (Computer Human Interaction) Conferences*

Review committee member for *HFES (Human Factors and Ergonomics) Conferences*

Scientific committee member for *Wonderground, the 2006 Design Research Society International Conference* in Lisbon 2006

Review committee for *The Emotional Wardrobe International Conference* in Bristol, UK 2006

Review committee member for the *Conference on Designing Pleasurable Products and Interfaces, 2003*.

RESEARCH FUNDING

Contracts

Shen, Y and Sanders, E.B.-N, Global Arts and Humanities Discovery Theme Grant titled "How the Arts and Humanities Can Benefit Our Well-being." Collaborators include Professor Paul Reitter from the Department of Germanic Languages and Literature. The budget is \$26,793.

Co-design Lead for OceanFrontCHANGE: Managing Ocean Front Ecosystems for Climate Change. This project works with conservation and fishing stakeholders in the Mozambique Channel to design research about ocean fronts, their use by marine species and fisheries and how front variability will change in the future. OceanFrontCHANGE is a 3-year, Belmont Forum funded project with an international team of physical, natural, and social scientists.
<https://www.belmontforum.org/>

Co-PI for a new sponsored project with the New Products-Medical Division at Midmark Corporation. The project is titled *Examining Exam Room Flow Designs that Improve Usability, Usefulness and Desirability of Outpatient Clinical Spaces*. The project cost is \$176,469.00. The other faculty members on the project include Carolyn Sommerich (ISE), Steve Lavender (ISE and Orthopaedics) and Kevin Evans (Health and Rehabilitation Sciences).

PI for an exploratory research project with internal start-up, CoGrowLab, from Honda R&D. Funding is \$199,739.00 from October 2014 to October 2015. The research involves exploration and experimentation in human-centered design to be addressed through co-creation between Honda's CoGrowLab and the Design Department at OSU.

Sanders, E.B.-N. (PI) and Staley, D. *Designing Spaces for Collaborative Creativity*. OSU Grant for Research and Creative Activity in the Arts and Humanities \$19,600
2012 – 2013

Co-PI on *A Participatory Design Process Addressing the Ergonomics of Hospital Patient Rooms*. Steve Lavender, PI, Associate Professor, Integrated Systems Engineering and Orthopaedics, The Ohio State University. Sponsored by the National Institute for Occupational Safety and Health (NIOSH). Total Cost: \$ 1,381,000
2009 – 2012

Co-PI on *Designing Musculoskeletal Disorder Interventions For Imaging Technologists*. Carolyn Sommerich, P.I., Industrial and Systems Engineering, The Ohio State University. Sponsored by The Centers for Disease Control and Prevention. Total Cost: \$780,000.
2009-2012

TEACHING

Undergraduate courses taught at The Ohio State University (current only)

Design Research One
Design Research Two
Design Thinking
Honors Research Design
Honors Thesis Research
Individual Studies

Graduate courses taught at The Ohio State University (current only)

Methods of Design Research
Exploration in Graduate Design Studies
Graduate Co-Design Studio
Graduate Design Seminar
Thesis Project Development
Thesis Writing Development
Individual Studies

ADDITIONAL TEACHING ACTIVITIES

US and Canada

Carnegie Mellon University in Pittsburgh, PA

Stanford University in Stanford, CA

Institute of Design, Illinois Institute of Technology in Chicago,

Washington University in St. Louis in MO

Rensselaer Polytechnic Institute in Troy, NY

North Carolina State University in Raleigh, NC

Savannah College of Art and Design in Savannah,

GA College for Creative Studies in Detroit, MI

Columbus College of Art and Design in Columbus

University of Cincinnati in Cincinnati, OH

University of Calgary in Calgary, Alberta

Emily Carr University of Art + Design in Vancouver, BC

University of Pennsylvania, Philadelphia, PA

University of the Arts, Philadelphia, PA

Northwestern University, Evanston, IL

International

University of Art and Design in Helsinki, Finland

Danmarks Designskole in Copenhagen, Denmark

The University of Design Schwäbisch Gmünd in Schwäbisch Gmünd,

Germany Delft University of Technology in Delft, the Netherlands

Universidad de las Americas in Puebla, Mexico

Duncan of Jordanstone College of Art and Design, University of Dundee in Dundee, Scotland

Linnaeus University in Nybro/Pukeberg, Sweden

Norwegian University of Science and Technology in Trondheim, Norway

SMIT (Studies on Media, Information and Telecommunication) at the Free University of Brussels in Brussels, Belgium

EOI (Escuela de Organizacion Industrial) School in Madrid, Spain

Instituto Tecnológico y de Estudios Superiores de Monterrey in México Pontificia Universidad Católica de Valparaíso in Viña del Mar, in Chile

School of Business and Culture, Seinäjoki University of Applied Science, Seinäjoki, Finland

PHD DISSERTATION COMMITTEE MEMBER

Awais Hameed Khan, 2022

Material Forms of Participation: Exploring the Value of Design by Making Design Methods Accessible to Non-designers, Examiner of a Higher Degree by Research Award at *The University of Queensland, Australia* for the School of Information Technology and Electrical Engineering, 2022.

Chen Hao, 2019

CULTURA: Achieving Intercultural Empathy through Contextual User Research in Design, Industrial Design Engineering, Delft University of Technology, The Netherlands, 2019.
Member of the Assessment Committee and External Examiner for the PhD Defense

Fredrik Sandberg, 2018

Designing Tools for Conviviality: A Design-Led Generative Exploration Into the Potentialities of Using Participatory Activity Mapping as a Convivial Tool For Smaller Sized Companies to Present and Enrich Their Work Environment, Linnaeus University, Pukeberg, Sweden, 2018.
Reader for the dissertation.

Saskia Coulson, PhD, 2016

Residencies with Resonance: A Case for Pragmatism in Design-led Concept Development, Duncan of Jordanstone College of Art and Design at the University of Dundee in Dundee, Scotland, 2016.
External Examiner for the PhD Defense

Signe Pedersen, PhD, 2016

Navigating Prototyping Spaces – Translation of Knowledge and Actors in Participatory Design, Faculty of Engineering and Science, Aalborg University, Copenhagen, Denmark, 2016.
Member of the Assessment Committee and External Examiner for the PhD Defense

Brita Fladvad Nielsen, PhD, 2015

Framing Humanitarian Action through Design Thinking, PhD in Design, Norwegian University of Science and Technology, Trondheim Norway, 2015.
Opponent for the Dissertation Defense

Guido Herman, PhD, 2015

Opening up Design: Engaging the Layperson in the Design of Everyday Products. PhD in Design, Umeå Institute of Design at Umeå University, Umeå Sweden, 2015.

Member of the Grading Committee

Radin Zaid Radin Umar, PhD, 2015

Factors Influencing Adoption in the Early Stages of Ergonomic Intervention Effort, PhD in Integrated Systems Engineering, The Ohio State University, 2015.

Candidacy Exam Committee Member

Dissertation Committee Member

Derya Ozcelik Buskermolen, PhD, 2013

End-User Involvement in the Early Phases of the Design Process, Industrial Design Department, Eindhoven University of Technology, The Netherlands.

Mike Rayo, PhD, 2013

Assessing Impact Of System Strategies, Positive Predictive Value And Staffing Levels On Detection Of Fatal Heart Arrhythmia, Health And Rehabilitation Sciences, The Ohio State University.

Paul Scudieri, PhD, 2013

Design Constraints and Product Evolution, Integrated Systems Engineering, The Ohio State University.

Isil Oygur, PhD, 2012

Configuring and Reconfiguring the User: How Designers Process User Information, Washington State University, Individual Interdisciplinary Doctoral Program.

Carolien E. Postma, PhD, 2012

Creating Socionas – Building Creative Understanding of People’s Experiences in the Early Stages of New Product Development, Industrial Design Engineering, Delft University of Technology, The Netherlands.

Pelin Arslan, PhD, 2012

Service Design for Social Interaction: Applying Mobile Technologies for a Healthier Lifestyle, Department of Design of the Politecnico di Milano, Italy.

Wei-Ting Yen, PhD, 2011

Product Physical Interface Design Characteristics For Older Adults With Hand Use Limitations Department of Industrial Engineering, The Ohio State University

Froukje Sleeswijk Visser, PhD, 2009

Bringing the Everyday Life of People into Design
Department of Industrial Design Engineering, Delft University of Technology

Bo Westerlund, PhD, 2009

Design Space Exploration: Co-operative Creation of Proposals for Desired Interactions with Future Artefacts, Human-Computer Interaction, Stockholm: KTH Royal Institute of Technology

Amod Damle, PhD, 2008

Influence of Design Tools on Design Problem Solving, Cognitive and Systems Engineering, The Ohio State University

Di Liu, PhD, 2008

Multi-phase Empirical Investigation and Path Modeling of Construction Workers’ Use of Personal Fall Arrest Systems, Department of Industrial Engineering, The Ohio State University

Marieke Sonneveld, PhD, 2007

Aesthetics of Tactual Experience, Department of Industrial Design Engineering, Delft

University of Technology

Tuuli Mattelmaki, PhD, 2006

Design Probes, University of Art and Design Helsinki

Eun Sook Kwon, PhD, 2004

A New Constructivist Learning Theory for Web-Based Design Learning with its Implementation and Interpretation for Design Education, Department of Art Education, The Ohio State University

Peter Kwok Chan, PhD, 2003

A Pattern Language for Design Development Process of a Web-based Online Course, Department of Art Education, The Ohio State University

Jodie Obradovich, PhD, 2001

Facilitating Synchronous Collaboration Among Distributed Agents in the Air Traffic Management System: A Descriptive Study, Industrial and Systems Engineering, The Ohio State University

Jill Strawbridge, PhD, 1989

Medication Noncompliance Among Older Adults: An Information Processing Approach, Industrial and Systems Engineering, The Ohio State University

MA and MFA COMMITTEE CHAIR

Jason Duffield, 2021

Future Experience Design for Social Work in Response to the COVID-19 Pandemic, MFA in Design Research and Development, The Ohio State University, 2021.
Thesis Committee Chair

Muhammad Fakhruddin Chen Yang, 2021

Changing the Perspective: A Framework for Virtual Reality in the Co-design Process, MFA in Design Research and Development, The Ohio State University, 2021.
Thesis Committee Chair

Lucas Himes, 2021

User Experience Design for the Mitigation of Covid-19 Related Misinformation, MFA in Design Research and Development, The Ohio State University, 2021.
Thesis Committee Chair

Shasha Yu, 2020

Facilitating a Creative Growth Mindset: A Creative Process that Integrates Gameplay with Maketools, MFA in Design Research and Development, The Ohio State University, 2020.
Thesis Committee Chair

Sana Benham Asl, 2020

Designing for Breast Cancer Survivors' Empowerment: Integration of Technology for Self-management Promotion through Participatory Design, MFA in Design Research and Development, The Ohio State University, 2020.
Thesis Committee Chair

Susan Booher, 2020

Investigation of Biophilic Interventions to Improve Mood and Behavior of Persons with Dementia, MFA in Design Research and Development, The Ohio State University, 2020.
Thesis Committee Chair

Yiting Wang, 2020

Co-designing with Older Adults for Voice Assistive Technology, MFA in Design Research and Development, The Ohio State University, 2020.

Thesis Committee Chair

Noor D. Murteza, 2020

Designer Fractal Patterns: Ecological Validity and the Psychological Wellbeing Effect of Fractal Patterns in Interior Spaces, MFA in Design Research and Development, The Ohio State University, 2020.

Thesis Committee Chair

Julianne Lipman, 2018

Designing for Senior Wellness: An Accuracy Technology System for Home Exercise Programs in Physical Therapy, MFA in Design Research and Development, The Ohio State University, 2018.

Thesis Committee Chair

Joshua B. Morrow, 2018

Co-Designing with Veteran Students: Incorporating Co-Design Thinking to Understand Current and Future Experiences of Veterans in a University Environment, MFA in Design Research and Development, The Ohio State University, 2018.

Thesis Committee Chair

Hemalatha Venkataraman, 2018

Developing the Postcard Exchange as a Tool in the Front End of Generative Design Research, MFA Candidate in Design Research and Development, The Ohio State University, 2018.

Thesis Committee Chair

Velvette L. Delaney, 2017

Utilizing Environmental Impact Data to Improve Graphic Design Practices: A Path Forward, MFA in Design Research and Development, The Ohio State University, 2017.

Thesis Committee Chair

Trisha Shah, 2017

Design for Inclusivity in Health Care for the LGBTQ+ Community, MFA in Design Research and Development, The Ohio State University, 2017.

Thesis Committee Chair

Sapna Singh, MFA 2016

Future and Value of Design Education, MFA in Design Research and Development, The Ohio State University, 2016.

Thesis Committee Chair

Kyle Wallace, MFA 2016

An Investigation of the Blurred Boundaries between Art, Craft, and Design, MFA in Design Research and Development, The Ohio State University, 2016.

Thesis Committee Chair

Erika Braun, MFA 2016

Giving Form to Wicked Problems Using a Hybrid Design Thinking Approach in Participatory Action Research, MFA in Design Research and Development, The Ohio State University, 2016.

Thesis Committee Chair

David McKenzie, MFA 2016

Prototyping with Co-designers to Imagine Future Experiences, MFA in Design Research and Development, The Ohio State University, 2016.

Thesis Committee Chair

Lingyue Hu, MFA 2014

Methods Selection for Novice Design Researchers, MFA in Design Research and Development, The Ohio State University, 2014.

Thesis Committee Chair

Katie Unrath, MFA 2014

The Creative Experience and the Physical Environment, MFA in Design Research and Development, The Ohio State University, 2014.
Thesis Committee Chair

Emily Strouse, MFA, 2013

Collective Creativity through Enacting: A Comparison of Generative Design Research Methods, Department of Design, The Ohio State University, 2013.
Thesis Committee Chair

Priya Ramnath, MFA, 2013

Emergent Design in USA and India: A Study of the Impact of Cultural Norms on Interior Space, Department of Design, The Ohio State University, 2013.
Thesis Committee Chair

Gabriel J. Tippery, MFA, 2012

Learning to Be in the Net Generation: A Holistic Learning Framework for Design Education, Department of Design, The Ohio State University, 2012.
Thesis Committee Chair

MS, MA and MFA COMMITTEE MEMBER

Maya Jenkins, 2021

The Student Experience in Seeking Help for Mental Health Challenges, MFA in Design Research and Development, The Ohio State University, 2021.
Thesis Committee Member

Will Nickley, 2020

Making for One Another: An Exploration of Design-based Making in Positive Youth Development Program Delivery, MFA in Design Research and Development, The Ohio State University, 2020.
Thesis Committee Member

Abel Hernández, 2018

Charting "Deep Metaphors" that Reveal Millennials' Mindsets of "Fast" and "Slow" Fashions, MFA Candidate in Design Research and Development, Department of Design, The Ohio State University, 2018.
Thesis Committee Member

Adam Fromme, 2018

Public Space Design for An Aging Population, MFA Candidate in Design Research and Development, Department of Design, The Ohio State University, 2018.
Thesis Committee Member

Jacinda Walker, MFA 2016

Design Journeys: Strategies for Increasing Diversity in Design Disciplines, MFA in Design Research and Development, Department of Design, The Ohio State University, 2016.
Thesis Committee Member

Darwin Mulijono, MFA 2016

The Relevance of Emergence in Human-centered Design, MFA in Design Research and Development, Department of Design, The Ohio State University, 2016.
Thesis Committee Member

Jason Tiberio, MFA 2016

The Dynamic and Adaptive Learning Platform: Exploring the Self-Initiated Learning Experience, MFA in Design Research and Development, Department of Design, The Ohio State University, 2016.
Thesis Committee Member

Samira Jain, MA 2016

Designing with Non-designers: Participatory Design Methods in the Arenas of Social Development and Commerce. MA in Design Writing & Criticism at the School of Visual Arts in New York City, 2016.

Reading Committee Member

Kat Keller, MFA 2014

Making Meaning and the Design Student: Fostering Self-Authorship in Studio Based Design Course, MFA in Design Research and Development, Department of Design, The Ohio State University.

Thesis Committee Member

Will Taylor, MFA 2014

A Comparative Analysis of Problem Solving Approaches between Designers and Engineers, MFA in Design Research and Development, Department of Design, The Ohio State University.

Thesis Committee Member

Mikaila Burns, MFA, 2014

Mapping the Gap: Using Growth Opportunities and Design Thinking to Eliminate the Creative Skills Crisis, MFA in Design Research and Development, Department of Design, The Ohio State University.

Thesis Committee Member

Wuyang Pei, MFA 2014

Exploring the Feasibility of Long Distance Design Research, MFA in Design Research and Development, Department of Design, The Ohio State University.

Thesis Committee Member

Saeide Douastmohammadi, MFA 2014

Product Customization Through Digital Fabrication Technology, MFA in Design Research and Development, Department of Design, The Ohio State University.

Thesis Committee Member

Andrew Frueh, MFA 2014

Tying the threads together, MFA in Art and Technology, Department of Art, 2014.

Thesis Committee Member

Patrick Moore, MFA 2013

FlySolo: The Designer as Entrepreneur, MFA in Design Research and Development, Department of Design, The Ohio State University.

Thesis Committee Member

Allen J. Cochran, MFA 2013

A Participatory Design Case Study: Designing for an Integrated Service Experience with a University Graduate Student Governance Organization, MFA in Design Research and Development, Department of Design, The Ohio State University.

Thesis Committee Member

Carolina Leyva Marino, MFA, 2013

Empathy in Design, The School of Design at the University of Cincinnati.

Thesis Committee Member

Molly Bryant, MFA 2012

A Study of Company Culture and Environments that Support Creativity, Innovation and Collaboration, MFA in Design Research and Development, Department of Design, The Ohio State University.

Thesis Committee Member

Kelly C. O’Gorman DeVore, MFA 2012

Design Activism & Design Education: Encouraging Social Responsiveness in Design Curricula, MFA in Design Research and Development, Department of Design, The Ohio State University.

Thesis Committee Member

Robin DesJardins, MFA 2012

Design, Field Studies, Sustainable Development: Looking at How Design Research Methods can be Applied to Fieldwork and Provide Solutions that Enable Sustainable Community Development, MFA in Design Research and Development, Department of Design, The Ohio State University.

Thesis Committee Member

Melanie Dresser, MFA 2012

Design, Fun and Sustainability, MFA in Design Research and Development, Department of Design, The Ohio State University.

Thesis Committee Member

Alessandra Cerqueira Mattos, MBA, MFA, 2011

Scent as a Medium for Design: An Experimental Design Inquiry, MFA in Design Research and Development, Department of Design, The Ohio State University.

Thesis Committee Member

Joelle Attalah, MFA 2011

Perceptions of Public Transportation with a Focus on Older Adults, MFA in Design Research and Development, Department of Design, The Ohio State University.

Thesis Committee Member

Majid Dadgar, MA 2011

Pattern Language: Identification of Design Opportunities for the Child with Autism Spectrum Disorder (ASD) to Develop his/her Social Skills, MFA in Design Research and Development, Department of Design, The Ohio State University.

Thesis Committee Member

Mert Sondac, MFA 2011

Another Inconvenient Truth: An Inquiry on Sustainability, Transportation and Design, MFA in Design Research and Development, Department of Design, The Ohio State University.

Thesis Committee Member

Linda Molander, MFA 2011

An Exploration of the Use and the Design of Participatory Workshops within the Design Process of Two Companies, School of Design, Linnaeus University, Sweden.

Thesis Committee Member

Kendra Louise Meyer, MFA 2010

Creativity in Repurposing Textiles, MFA in Design Research and Development, Department of Design, The Ohio State University.

Thesis Committee Member

Erliati Sukerman, MS 2010

Designing Great User Experience for a Web-Based Collaboration Tool by Gaining Insights from the Generation Y Office Workers, Industrial Design Engineering, Delft University of Technology.

Thesis Committee Member

Hai-Hong Wang, Master of Design 2010

Co-designing Hair Care Experience: How has Generative User Research Helped Product Innovation? A Case of Unlocking Users' Inner Feelings to Gain Patterns of Ideal Experience School of Design, The University of Cincinnati.

Thesis Committee Member

Robert VanDevender Strouse, MFA 2010

Design Research in Design Education: Relevance and Implementation, MFA in Design Research and Development, Department of Design, The Ohio State University.
Thesis Committee Member

Matthew Stanford, MFA 2010

Analysis + Application of Presenting Visual Wayfinding Information on Handheld Devices, MFA in Design Research and Development, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.
Thesis Committee Member

Lane Kuhlman, MFA 2009

Gesture Mapping for Interaction Design: An Investigative Process for Developing Interactive Gesture Libraries, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.
Thesis Committee Member

Carissa A. Henriques, MFA 2009

Modes of Participation: Co-creative Approaches to the Design Process, School of the Arts at Virginia Commonwealth University.
Thesis Committee Member

Erik Evensen, MFA 2009

Making it Fun: Uncovering a Design Research Model for Educational Board Game Design. Department of Industrial, Interior and Visual Communication Design, The Ohio State University.
Thesis Committee Member

AnneMarie Abell, MFA 2009

Keeping Students in the Green: Examining Social Media as a Tool to Improve Communication with University Students, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.
Thesis Committee Member

Merce Graell-Colas, MFA 2009

Exploring Visual Means for Communication and Collaboration in Multidisciplinary Teams: An Interpretation and Implementation for Design Education, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.
Thesis Committee Member

Teresa Ung, MFA 2009

Brainstorming Methodology: Integrating User-input in the Divergence Phase of the Design Process Department of Industrial, Interior and Visual Communication Design, The Ohio State University.
Thesis Committee Member

Jaime Barrett, MA 2008

The Hybrid Designer, Emily Carr Institute of Art + Design.
Thesis Committee Member

Erik A. Aagard, MFA, 2008

A Pre-Design Study of Patient Medical Professional Attitudes and Reactions Towards The Colors Of Medical Scrubs, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.
Thesis Committee Member

Richard Teynor, MFA 2007

Ergonomic Co-creation: An Exploration of an E-Commerce Model Using Mass Customization,

Department of Industrial, Interior and Visual Communication Design, The Ohio State University.
Thesis Committee Member

Long Jiao, MFA, 2007

Identification of Issues and Opportunities of Design Entrepreneurship: Product Commercialization as a Design Business Trend, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.
Thesis Committee Member

Anthony Stehlik, MFA 2006

Separating the Means and Ends of Critical Design: Seven Attempts for Conclusive Results, Department of Industrial, Interior Space and Visual Communication Design, The Ohio State University.
Thesis Committee Member

Megan Theis, MFA 2006

Bilingual Consumer Goods Packaging in the United States: Resources for Professional Designers, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.
Thesis Committee Member

Boris Bezertzis, MFA 2006

Generative Tools Used to Search the Design Solution Space: Lessons Learned from Exploring Travelers' Experience in Airports, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.
Thesis Committee Member

Hai Nguyen, MFA 2006

Investigation of Alternative Approaches for Ecologically Responsible and Culturally Friendly Composting Toilet, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.
Thesis Committee Member

Joshua McClurg-Genevese, MFA 2006

Temporal Models of Interaction as Support for Analysis in User-Centered Design, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.
Thesis Committee Member

Karen Sterrett, MFA 2006

The Use of Writing to Learn Exercises as a Strategy for Teaching Design, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.
Thesis Committee Member

Hyejin Chung, MFA 2005

Kitchen-Related Lifestyle Design: An Investigation of Cultural and Social Issues of Korean Kitchen Design, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.
Thesis Committee Member

Yuegu Hu, MFA 2005

From Paper to Screen: Exploring Alternative Visual Communication Techniques for the Preliminary Stages of Architectural Projects Using the Computer Technology, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.
Thesis Committee Member

Seung Min Park, MA 2005

Differentiation by Design: A Semantic Approach, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.

Thesis Committee Member

Todd Delman, MFA 2004

Collaboration with Children in the Character Design Process for a Short, Animated Film, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.

Thesis Committee Member

Rattanawadee Jittirat, MFA 2004

Applications, Methods, Tools, and Virtual Environments for Mapping Web Site Structures, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.

Thesis Committee Member

Carl Nestor, MFA 2003

Designing for Encoding Specificity: Research-Based Visual Design Criteria that Enhance Encoding in Educational Material, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.

Thesis Committee Member

Amy Lynn Dull, MA 2003

My-Eye-View: A Monocular Blindness Community, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.

Thesis Committee Member

Amod Damle, MA 2002

Layer Tool: An Analysis of the Dialogue Between Conceptual and Physical Form of Digital Artifacts, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.

Thesis Committee Member

Geraldine Arnold, MFA 2002

Developing Spatial Visualization in Engineering Students Combining Graphical Interface, Games and the Internet, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.

Thesis Committee Member

Chun-Yen Wang, MFA 2001

Knowledge-Based Design: Networked and Visualized Knowledge for Improved Product Development, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.

Thesis Committee Member

Heesung Koo, MFA 2001

Web Interplay: A Children's Web Browser Interface Design, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.

Thesis Committee Member

Charlotte J. Belland, MFA 2000

Optimizing Interactive Animation - Can Sound Substitute for in Between Frames?, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.

Thesis Committee Member

John Buck, MA 1999

Learner Interaction with Visual Curricular Material: A Model of Application of Design for Enabling Wetland Awareness in Environmental Education, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.

Thesis Committee Member

Kavita Appachu, MA 1999

Resource Discovery with Search Engines on the World Wide Web (WWW): User Classification Based on Search Style, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.

Thesis Committee Member

Nagarajan Gopalan, MDes, MA 1997

WORLDINFO: An Information Resource for International Business Accessible Through The World Wide Web, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.

Thesis Committee Member

Ingrid Limmer, MA 1997

Designers' Intentions Versus Users' Interpretations of Web Sites - A Study With An Emphasis on Semantics, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.

Thesis Committee Member

Janna M. Thompson, MA 1997

Non-Thesis Project: Methods of Design: A Collection of Design Methods in Relation to Visual Communication, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.

Thesis Committee Member

Uday Dandavate, MA 1996

User Response to Video Images of Products. A Prelude to a Multimedia-based Methodology to Record Users' Emotional Responses to New Product Concepts, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.

Thesis Committee Member

Thomas Neuzil, MA 1994

Consistency of Semantic Attributes as Applied to the Design of Spaces and Objects: Utilization of Lannoch and Lannoch's Semantic Dimensions of Space Categorization Model as a Foundation Department of Industrial, Interior and Visual Communication Design, The Ohio State University.

Thesis Committee Member

Matthew Holloway, MA 1993

The Effects of Visualization on Operator Performance during Fault Management, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.

Thesis Committee Member

Kari Cassell, MA 1992

Design Language of Communication System of Visual Cues, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.

Thesis Committee Member

Suryanarayana Vanka, MA 1990

A Methodology for Cross-Cultural Semantic Design, Department of Industrial, Interior and Visual Communication Design, The Ohio State University.

Thesis Committee Member