

CURRICULUM VITAE

John Allan Brabyn, Ph.D.

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EDUCATION:

<u>Institution and Location:</u>	<u>Degree:</u>	<u>Year:</u>	<u>Field of Study:</u>
University of Canterbury, New Zealand	Ph.D.	1978	Electrical Engineering
University of Canterbury, New Zealand	B.E.(Hons)	1974	Electrical Engineering

HONOURS & AWARDS:

2006 AER Award for Outstanding Contributions to Low Vision Research & Literature
2004 Garland Clay Award, American Academy of Optometry
2004 William A Kettlewell Chair in Vision Science
1997 Catherine D. Kettlewell Endowed Chair.
1988 William A. Kettlewell Chair in Vision Science.
1974-78 University Grants Committee Scholarship, New Zealand.
1972 Senior Scholar, University of Canterbury.
1974 First Class Honours, University of Canterbury.

MEMBERSHIPS:

Member, Institute of Electrical and Electronic Engineers, 1979 to present.
Founding Member, Rehabilitation Engineering Society of North America (Resna) 1979 to present.
Member, International Society for Low Vision Rehabilitation Research (ISLRR).
Member, Association for Research in Vision and Ophthalmology (ARVO).
Member, Association for Education and Rehabilitation of the Blind and Visually Impaired (AER).
Member, Low Vision Research Group (LVRG).
Member, Engineering and Medicine and Biology Society, 1979 to present.

FIELDS OF INTEREST:

Research and Development for blind, visually impaired, deaf, and multiply disabled individuals; transfer of technology to industry; human factors engineering.

PROFESSIONAL EXPERIENCE:

2011 to present Executive Director, The Smith-Kettlewell Eye Research Institute.
1995 to present Director (1980-94 Co-Director), Rehabilitation Engineering Research Center, The Smith-Kettlewell Eye Research Institute, San Francisco, CA.
1981 to present Senior Scientist, Smith-Kettlewell Eye Research Institute, San Francisco, California
1980 to 1981 Scientist (1979-80 Associate Scientist), Medical Research Institute, Pacific Presbyterian Medical Center, San Francisco, California

- 1978 to 1979 Research Engineer, The Smith-Kettlewell Eye Research Foundation, San Francisco, California. Designed and developed scanning sonar-tactile mobility aids for the blind. Supervisor: Dr. Carter Collins.
- 1977 Research Assistant, University of Canterbury, Department of Electrical Engineering, Christchurch, New Zealand. Studied the feasibility of a new class of mobility aid for the blind. Supervisor: Dr. Leslie Kay.
- 1977 Senior Tutor, Christchurch College, Christchurch, New Zealand. Tutored in math and engineering.
- 1974 to 1977 Ph.D. Student, University of Canterbury, Department of Electrical Engineering, Christchurch, New Zealand. Specialized in the computer simulation and evaluation of blind mobility.

EXAMPLES OF PROFESSIONAL SERVICE:

Co-Chairman, SIG on Cognitive and Sensory Loss, Resna.
 Member, RESNA Standards Committee on Assistive Products for Persons with Vision and Hearing Impairments (ISO TAG Committee) 2005-2008
 Associate Editor, IEEE Trans Neural Systems & Rehabilitation Engineering, 2004-2006
 Chairman, Coalition of Rehabilitation Engineering Research Organizations, 2002-Present Chairman, RESNA Special Interest Group on Sensory Aids, 1986 and 2005-present.
 Co-Organizer, National Eye Institute Workshop: Research Opportunities in Low Vision, Jan 02
 Member, National Research Council Committee on Disability Determination for Individuals with Visual Impairments, 2000-2002
 Member, Editorial Board, Assistive Technology, 2003-present
 Member, Editorial Board, Journal of Rehabilitation Research and Development, 2000-2004
 Member, Low Vision Research Group, 1997-2004
 Chairman, Field Initiated Grant review committee on technology, NIDRR, 1999-2001
 Member, Veterans Administration RR&D Service Scientific Review Board, 1985-2001
 Associate Editor, IEEE Transactions on Rehabilitation Engineering, 1994-96
 Member, Editorial Board, Technology and Disability, 1993-95.
 Member, National Research Council Committee: Currency Features for Visually Impaired, 1994.
 Chairman, Small Business Innovative Research Study Section, National Eye Institute, 1986-1991, and periodically 1992-present.
 Co-Chairman, RESNA Conference, 1986.
 Consulting Member, Mississippi State R&T Center Advisory Council, 1984-2001.
 Chairman, Committee on Prosthetics and Sensory Aids, Engineering in Medicine and Biology Society, Institute of Electrical and Electronic Engineers, 1981 to 1982.
 Member, Advisory Committee, RERC on Universal Telecommunications Access, Gallaudet University, 1995-99

SELECTED PEER-REVIEWED PUBLICATIONS:

Lott LA, Schneck ME, Haegerström-Portnoy G, Hewlett S, Stepien-Bernabe N, Gauer BM, Zaidi A, Fu AD. & Brabyn JA (2021) Simple Vision Function Tests that Distinguish Eyes with Early to Intermediate Age-related Macular Degeneration, Ophthalmic Epidemiol. 28:2, 93-104,
 Brabyn J, Levitt H, Miele J.: Sensory Disabilities (Vision and Hearing). In Mihailidis A, Smith R (Eds) Rehabilitation Engineering: Principles and Practice, Resna Press, 2020 (in press).

- Lott LA, Schneck ME, Haegerström-Portnoy G, Hewlett S, Gauer B, Brabyn JA. Vision Function in Early to Intermediate AMD: Progression to Advanced AMD *Invest. Ophthalmol. Vis. Sci.* 2018; 59(9):ARVO abstract 1263.
- Reinkensmeyer DJ, Blackstone S, Bodine C, Brabyn J, et al. How a diverse research ecosystem has generated new rehabilitation technologies: Review of NIDILRR's Rehabilitation Engineering Research Centers, *J. NeuroEngineer. Rehab* 14, 109 (2017).
- Lott LA, Schneck ME, Haegerström-Portnoy G, Hewlett S, Brabyn JA. Reading Performance in Intermediate Age-related Macular Degeneration: Context Effects *Invest. Ophthalmol. Vis. Sci.* 2017; 58(8):ARVO abstract 4701.
- Schneck ME, Lott LA, Haegerström-Portnoy G, Gauer B, Hewlett S, Brabyn JA. Vision function differs with retinal characteristics in AMD: large drusen with and without pigment abnormalities. *Invest. Ophthalmol. Vis. Sci.* 2017; 58(8):ARVO abstract 4708.
- Lott LA, Schneck ME, Haegerström-Portnoy G, Hewlett S, Gauer B, Brabyn JA. Longitudinal Assessment of Non-standard Vision Function in Early to Intermediate AMD: Baseline Update *Invest. Ophthalmol. Vis. Sci.* 2016; 57(12):ARVO Abstract 624.
- Lott LA, Schneck ME, Haegerström-Portnoy G, Hewlett S, Brabyn JA. Assessing Non-standard Vision Function in Early to Intermediate AMD *Invest. Ophthalmol. Vis. Sci.* 2015; 56(7):ARVO Abstract 2219.
- Schneck ME, Haegerström-Portnoy G, Lott LA, Brabyn JA. Comparison of Panel D-15 tests in a large older population. *Optometry and Vision Science*, 2014 Mar; 91 (3): 284-90.
- Haegerström-Portnoy G, Schneck ME, Lott LA, Hewlett SE, Brabyn JA. Longitudinal increase in anisometropia in older adults. *Optometry and Vision Science* 2014 Jan; 91(1): 60-67.
- Simon H, Gilden D, Brabyn J, Lotze A. Acoustic Cues Used by Blind Travelers. *Journal of the Acoustical Society of America*, 131 (4), 3516, 2012. -
- Schneck ME, Lott LA, Haegerström-Portnoy G, Brabyn JA. Association between hearing and vision impairments in older adults. *Ophthalmic Physiol Opt* 2012 Jan;32(1):45-52.
- Lott LA, Schneck ME, Haegerström-Portnoy G, Brabyn JA. Non-standard vision measures predict mortality in elders: The Smith-Kettlewell Institute (SKI) study. *Ophthalmic Epidemiol.* 2010 Aug;17(4):242-50.
- Schneck ME, Haegerström-Portnoy G, Lott LA, Brabyn JA. Monocular vs. binocular measurement of spatial vision in elders. *Optom Vis Sci.* 2010 Aug;87(8):526-31.
- Brabyn J. "Assistive Technologies for the Blind." In Goldstein, B (Ed): Sage Encyclopedia of Perception. Sage Publications, Thousand Oaks, CA, January 2010 pp 64-67.
- Brabyn J. "Sensory Rehabilitation." In Goldstein, B (Ed): Sage Encyclopedia of Perception. Sage Publications, Thousand Oaks, CA, January 2010. pp 881-883.
- Marston J, Cao G, Brabyn J, Miele J. "Accessible Geographical Information for People with Low Vision." Proceedings of the CSUN Conference, 2010.
- H. Shen, K. Y. Chan, J. Coughlan and J. Brabyn. "A Mobile Phone System to Find Crosswalks for Visually Impaired Pedestrians." *Technology and Disability*, Vol 20, Number 3, pp 217-224, 2008.
- Brabyn J. "Vision". In Lange M (Ed): *Fundamentals in Assistive Technology (4th Edition): An Introduction to Assistive Technology Implementation in the Lives of People with Disabilities*. Resna Press, Arlington VA, 2008, pp 293-311.
- Seelman K, Palmer C, Ortmann A, Mormer E, Guthrie O, Miele J, Brabyn J. *Quality-of-Life Technology for Vision and Hearing Loss: Highlights of Recent Developments and Current Challenges in*

- Technology. *IEEE Engineering in Medicine and Biology Magazine*, 27, 2, 40-55. March/April 2008.
- Brabyn J, Schneck M, Lott L, Haegerström-Portnoy G. "Dual Sensory Loss: Overview of Problems, Visual Assessment, and Rehabilitation". *Trends in Amplification*, 11, 4, December 2007, 219-226.
- Brabyn JA, Seelman K, Panchang S. "Aids for People who are Blind or Visually Impaired". In Cooper RA, Ohnabe H, Hobson D (Eds): *An Introduction to Rehabilitation Engineering*. Taylor & Francis, New York 2007. pp 287-313.
- Brabyn, J. Future Directions in Blindness and Low Vision: Perspectives from a State-of-the-Science Conference. *Visual Impairment Research*, Vol 8 No 3, December 2006, 61-66.
- Seelman KD, Brabyn JA, Ortmann AJ, Palmer CV. Sensory Aids. In Akay, M. (Ed): *Wiley Encyclopedia of Biomedical Engineering*. April 2006. New Jersey.
- Lott LA, Haegerström-Portnoy G, Schneck ME, Brabyn JA. Face recognition in the elderly. *Optometry and Vision Science* 2005; 82(10): 874-81.
- Brabyn JA, Schneck ME, Haegerström-Portnoy G, Lott LA. Night driving self-restriction: Vision function and gender differences. *Optometry and Vision Science* 2005; 82(8): 755-64.
- Brabyn JA, Schneck M, Haegerström-Portnoy G, Lott L. Functional vision: "Real World" impairment, examples from the SKI Study. *Visual Impairment Research* 2004; 6(1): 35-44.
- Schneck ME, Haegerström-Portnoy G, Lott L, Brabyn JA, Gildengorin G. Low contrast vision function predicts subsequent acuity loss in an aged population: The SKI study. *Vision Research* 2004; 44: 2317-25.
- West CG, Gildengorin G, Haegerström-Portnoy G, Lott LA, Schneck ME, Brabyn JA. Vision and driving self-restriction in older adults. *J Am Geriatr Soc*. 2003 Oct;51(10):1348-55.
- Brabyn, JA, Lott LA, Haegerström-Portnoy G, Schneck ME. Night driving avoidance and vision in old age: The SKI Study. *ARVO* 2003.
- Haegerström-Portnoy G, Schneck ME, Brabyn JA, Lott LA. Development of refractive errors into old age. *Optometry and Vision Science*, 2002 October 79(10): 643-9.
- Lott LA, Haegerström-Portnoy G, Schneck ME, Brabyn JA. Reading performance in older adults: the SKI Study. The Fall Vision Meeting, Oct 24-27, 2002, San Francisco. *Journal of Vision* Vol 2. No 10, Abstract 36, Page 36a.
- Schneck ME, Haegerström-Portnoy G, Lott LA, Brabyn JA. Predicting declines in vision and vision performance in older individuals. The Fall Vision Meeting, Oct 24-27, 2002, San Francisco. *Journal of Vision* Vol 2. No 10, Abstract 37, Page 37a.
- Brabyn JA, Alden A, Haegerström-Portnoy G, Schneck M: GPS Performance for Blind Navigation in Urban Pedestrian Settings. *Proceedings, Vision 2002, Goteborg, Sweden, July 2002*.
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- Lott LA, Haegerström-Portnoy G, Schneck ME, Brabyn JA, Gildengorin GL. Predicting reading performance decrements in older adults with good acuity. *ARVO Abstract #3829, 2002*.
- West CG, Gildengorin G, Haegerström-Portnoy G, Schneck ME and Lott L and Brabyn JA. Is vision function related to physical functional ability in older adults? *J. Am. Geriatrics Soc*, 2002, 50:136-145.
- Brabyn JA, Haegerström-Portnoy G, Lott LA, Schneck ME, Gildengorin GL. Predicting visual acuity loss in an older population: the SKI study. *Inv. Ophthalmol. & Vis. Sci*. Dec. 2002, Vol. 43, *ARVO Abstract #3841*.
- Haegerström-Portnoy G, Schneck ME, Brabyn JA, Lott LA. Changes in vision function over time in an older population: the SKI study. *ARVO Abstract #4717, 2002*.

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- Haegerström-Portnoy G, Schneck, ME, Brabyn JA, Lott L. Refractive error distributions in very old observers. *Investigative Ophthalmology and Visual Science*, Suppl, 42/4, S390, 2001.
- Lott LA, Haegerström-Portnoy G, Schneck ME, Brabyn JA. Face and object recognition in elders. *Investigative Ophthalmology and Visual Science*, Suppl, 42/4, S863, 2001.
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- Brabyn, J. "Orientation and Navigation Systems for the Blind: An Overview of Different Approaches." Keynote paper, *International Conference as Navigation Technology for the Blind*, Royal National Institute for the Blind, February 1995.
- Brabyn, J., Legge, G. (Chapter Co-authors), "Assessment of Needs and Requirements." In, National Research Council, National Material Advisory Board, *Study of Currency Features Usable by the Visually Impaired*, National Academy Press, 1995.
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- Brabyn, J., Schneck, M., Haegerström-Portnoy G., Jampolsky, A. "Functional Assessment of Vision Under Poor Lighting and Contrast: The SKILL Card," *Proceedings, RESNA '94*, Nashville, June 17-22, 1994, 261-263.
- Brabyn, J., Schneck, M., Haegerström-Portnoy G., and Steinman, B. "Vision Test Performance and Accident Proneness in Drivers Over the Age of 55," *Proceedings, Vision Science and Its Applications Topical Meeting*, Optical Society of America, 1994, 2, 210-213.
- Crandall, W., Gerrey, W., and Brabyn, J. Remote Reading for Visually Impaired People: A New Application for Telecommunications. *Technology and Disability*, Vol. 3, No. 3, August 1994, 204-213.
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- Brabyn, J.A., Crandall, W., and Gerrey, W. "Talking Signs: A Remote Signage Solution for the Blind, Visually Impaired and Reading Disabled," *Proceedings, 15th Annual International Conference, IEEE Engineering in Medicine and Biology Society*, October 28-31, 1993, San Diego, CA.
- Brabyn, J.A., Jampolsky, A., Haegerström-Portnoy G., Schneck, M., Colenbrander, A., and Winderl, M. "New Low Vision Devices and Tests," *Proceedings, RESNA 16th Annual Conference*, June 12-17, 1993, Las Vegas, NV.
- Schneck, M., Brabyn, J.A., Haegerström-Portnoy G., Jampolsky, A., and Katz, B. Poster Presentation, "A New Test for Vision Under Poor Lighting and Contrast: The SKILL Card," California Pacific Medical Center Research Week Symposium, San Francisco, November 17, 1993.

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SELECTED ABSTRACTS, PRESENTATIONS, & PROCEEDINGS:

- Pitcher-Cooper C, John Brabyn JA. ‘The Unstoppable Utility of You Describe: Audio Description and Innovation at The Smith-Kettlewell Eye Research Institute RERC.’ Proc. WIRERC 2020 Forum, 2021.
- Brabyn J. Contributions to Vision Rehabilitation, Jampolsky Day, Pacific Vision Foundation, San Francisco, Mar 1, 2021.
- Brabyn J. Vision Problems in the Very Young. 45th Annual Jampolsky Fellows Reunion. San Francisco, CA, Aug 15-18, 2019
- Brabyn J. Coordinator, ‘‘Innovations in Access,’’ AER Conference, MacFarland Seminar, July 25, 2018, Reno, Nevada, presented by NIDILRR RERC at Smith-Kettlewell Eye Research Institute.
- Brabyn J, Miele J, Coughlan J, Warner E. ‘‘Talking Signs & overThere,’’ NIDILRR 40th Anniversary Poster Presentation, Oct 18, 2018.
- Brabyn J. Organizer, Proceedings of Haptics Symposium to honor Dr. Val Morash at Smith-Kettlewell Eye Research Institute, San Francisco, 3-29-2018. Haptics Symposium on Blindness & Low Vision, ed. Stepien-Bernabe N. SK Press.
- Brabyn J. Attentional Visual Fields Across the Lifespan, Jampolsky Day, Pacific Vision Foundation, San Francisco, Feb 26, 2018.
- Brabyn J. Reading Difficulties in the Elderly: A Scientist’s Perspective. 43rd Annual Jampolsky Fellows Reunion. San Francisco, CA, Aug 27-30, 2017.
- Brabyn J. Reading Difficulties in the Elderly. CLADE International Symposium on Strabismus, Buenos Aires, Argentina, October 2017.
- Brabyn J. Vision and Rehabilitation Research at Smith-Kettlewell. 42nd Annual Jampolsky Fellows Reunion. San Francisco, CA, Aug 25-28, 2016
- Brabyn JA. Research on Binocular Vision Problems in the Elderly, 41st Annual Jampolsky Fellows Meeting, San Francisco, CA, July 9-12, 2015.
- Brabyn J. Binocular Deficits in the SKI Study of Elder Vision. CLADE International Symposium on Strabismus, Dominican Republic, April 2015.
- Brabyn J. Changing Populations, John Brabyn Moderator, State of the Science Conference, Dec 15, 2015, Smith-Kettlewell Eye Research Institute.
- Brabyn JA, Gilden D. Exhibits of Technology for Blindness and Low Vision, Resna Conference, annually 1979-2015.
- Brabyn J. Binocular Deficits in the SKI Study of Elder Vision. XX CLADE International Symposium, Punto Cana, Dominican Republic, April 29-May 2, 2015.
- Brabyn JA, Exhibit of Technology for Low Vision and Blindness. ADA 25th Anniversary Exhibit, Smithsonian Institution, Washington DC, July 2015.
- Brabyn J. Vision and Rehabilitation Research at Smith-Kettlewell. Guest Keynote Speaker, Jampolsky Day, Pacific Vision Foundation, San Francisco, Mar 30, 2015.
- Brabyn JA. Smith-Kettlewell Research Update, 40th Annual Jampolsky Fellows Meeting, San Francisco, CA, Aug 21-24, 2014.
- Brabyn J. Neurophysiology of Problems in Strabismus Management. CLADE International Symposium on Strabismus, Panelist. Rio de Janeiro, Brazil, April 2013.
- Brabyn JA. Smith-Kettlewell Research Update, Annual Jampolsky Fellows Mtg, Napa, CA, Oct 17-19, 2013.

- Brabyn J. Organizer, Clinical Problems in Strabismus Symposium at Smith-Kettlewell Eye Research Institute, San Francisco, Nov 7-9, 2012. Ed. Tina Rutar, SK Press.
- Brabyn JA. Smith-Kettlewell Research Update, 39th Annual Jampolsky Fellows Meeting, Asilomar, CA, Aug 8-12, 2012.
- Brabyn J. Organizer, Visual Function and its Management in mTBI Conference at Smith-Kettlewell Eye Research Institute, San Francisco, March 4-5, 2011. Ed. Christopher Tyler, SK Press.
- Brabyn JA, Co-Organizer, “Visual Function and its Management in mTBI”. National Symposium, Smith-Kettlewell Eye Research Institute, San Francisco, March 4-5, 2011.
- Brabyn, JA. Binocular Vision Problems in mTBI. Report on a SKERI Symposium. 38th Jampolsky Fellows Meeting, San Francisco, CA, March, 2011.
- Brabyn J. Changing Target Populations, John Brabyn Moderator, State of the Science Conference, Feb 4, 2010, Smith-Kettlewell Eye Research Institute.
- Brabyn J. Research as a Basis for Codes and Standards. Invited panel presentation to GSA Workshop on Building Design for Low Vision, Washington DC, September 29, 2010.
- Brabyn, J. Assistive Technology Development Problems: Lessons from a Career. (Panel organizer and presenter). Envision Conference, San Antonio, September 25, 2010.
- Brabyn, J. A Lifetime of Mistakes in Assistive Technology. Keynote presentation at Workshop on Computer Vision Applications for the Blind and Visually Impaired, IEEE Conference on Computer Vision, San Francisco, June 14, 2010.
- Brabyn JA. R&D on Technology for the Visually Impaired. Visiting Lecture, University of Montreal, October 7, 2010.
- Brabyn J. Seeing Beyond the ADA for Healthcare and Senior Living Environments. Special Brown Bag Presentation, Smith Group Architects, San Francisco, May 13, 2010.
- Brabyn J, Shen H, Gerrey W, Coughlan J, Fowle T. Accessing Instruments and Appliances with Visual Displays. Envision Conference, September 2009.
- Brabyn J. New Map Technologies for Wayfinding. (Panel organizer and presenter) Vision 2008, Montreal., June 2008.
- Brabyn J. Research on Visual Impairments in Older Persons. Low Vision Forum, San Francisco, April 2008.
- Brabyn JA, Haegerström-Portnoy G, Schneck ME, Lott LA. “Attentional Visual Field Test Predicts Future Cognitive Performance. ARVO poster presentation, May 2007.
- Brabyn J. Dual Sensory Loss: Introduction to State of the Science. Keynote presentation, State of the Science Conference, RERC on Hearing Enhancement, Gallaudet University, Washington DC, September 20, 2006.
- Brabyn KA, Lott LA, Haegerström-Portnoy G, Schneck ME. Vision variables predict future cognitive performance. ARVO poster presentation, May 2006.
- Brabyn J. Where does NIDRR Rehabilitation Technology Research Fit In? Recent Highlights and Future Needs. Invited presentation, National Eye Institute 8th National Eye Health Education (NEHEP) Conference, Santa Fe, New Mexico, March 2006.
- Brabyn, J. Vision Assessment: Relevance to Dual Sensory Loss. Current Practice and Future Needs. Invited presentation at Dual Sensory Loss Consensus Conference, Veterans Administration, Portland, Oregon. Sept 27-28, 2004.
- Brabyn, J. “Age-Related Vision Deficits: Relation to Sign Reading and Independent Functioning”. American Society on Aging Conference, San Francisco, April 13, 2004.

- Brabyn, J. "Vision and Aging" Presentation to San Francisco Low Vision Forum, University of California, San Francisco, Feb 7, 2004.
- Brabyn JA, Schneck M, Haegerström-Portnoy G, and Lott L. Functional vision: "Real World" Impairment, Examples from the SKI Study. Proceedings of a conference on Functional Vision: Assessment and Outcome, Morgantown, West Virginia, May 2003.
- Brabyn, J. "Aging and Vision Loss" Invited Lecture, Emory School of Medicine and Veterans Administration RR&D Center, Atlanta, Georgia, December 11, 2003.
- Brabyn, J. "Vision Changes in Aging: Importance to Low Vision Rehabilitation". Scotoma Training Program, American Academy of Ophthalmology, Anaheim, California, November 16, 2003.
- Brabyn, J. "Functional Vision Impairment: Findings from the SKI Study". Functional Vision Conference, West Virginia University Eye Institute, Morgantown West Virginia, May 30, 2003.
- Keynote Speaker, "Orientation and Navigation Systems for the Blind: An Overview of Different Approaches," International Conference on Orientation and Navigation Systems for Blind Persons, London, England, February 1-2, 1995.
- Brabyn, J., Haegerström-Portnoy G., Schneck, M., Hennessey, D. "Attentional Visual Fields: Age Changes and Relation to Driving," *Invest. Ophthalmol. Vis. Sci.*, 35, 4, 1994.
- Brabyn, J., Schneck, M., Haegerström-Portnoy G., Steinman, B. "Vision test performance and accident-proneness in drivers over the age of 55," *Vision Science and its Applications*, Technical Digest Series, Vol. 2, 206-209, 1994.
- Brabyn, J.A., Schneck, M., Haegerström-Portnoy G., and Jampolsky, A. Poster Presentation, "Practical Assessment of Vision in Older Individuals," California Pacific Medical Center Research Week Symposium, San Francisco, November 17, 1993.
- Brabyn, J.A. Invited participant in poster exhibit for California Pacific Medical Center Research Symposium, San Francisco, October 14, 1992.
- Brabyn, J.A. "The Design of Auditory Instrument and Computer Displays for the Blind." Presented at the *Society for Information Display 1992 International Symposium, Seminar and Exhibition*, Boston, May 21, 1992.
- Brabyn, J.A. and Loughborough, W. "A Digitizing Touch-Tablet/Synthetic Speech Computer Interface," presented at Annual International Conference, IEEE Engineering in Medicine and Biology Society, Orlando, FL, October 31-November 3, 1991.
- Brabyn, J.A. "Problems to be Overcome in High Technology for the Visually Impaired." Special session on Technology, American Academy of Optometry, Nashville, December 8-10, 1990.
- Brabyn, J.A. New Technology for the Blind, International Symposium "The Shape of Services in the Future" National Mobility Centre, Kew, Victoria, Australia, March 28-30, 1988.
- Brabyn, J.A. Session Moderator, "Science and Technology for Blind and Visually Impaired People: Computer Technology, Education and Employment," AFB/FJB International Symposium, "Vision Loss: Everybody's Business," Los Angeles, February 3-6, 1988.
- Brabyn, J.A. Invited Speaker, "New Technology for the Blind: Examples and Issues." Royal Guide Dogs for the Blind Associations of Australia, Conference "The Shape of Services in the Future." Melbourne, March 28, 1988.
- Brabyn, J.A. Session Moderator, "Sensory Aids for the Visually Impaired," RESNA Conference, Montreal, June 1988.
- Brabyn, J.A. "Computer Access Problems of the Future," talk given at Sensory Aids Foundation, Palo Alto, August 19, 1988, and September 16, 1988.

- Brabyn, J.A., Session Chair, "Assistive Devices I," IEEE/EMBS 10th Annual International Conference, New Orleans, LA, November 5, 1988.
- Brabyn, J.A. Guest Lecture, "Research and Development in Sensory Aid Technology." Sensory Seminar, San Francisco State University, Department of Special Education, December 2, 1987.
- Brabyn, J.A. Lecture: "Mobility Problems of the Elderly." University of California, Berkeley School of Optometry, Lecture Series on Functional Impact of Sensory Loss with Aging, October 8, 1987.
- Brabyn, J.A. Keynote Speech: "Let's Not Reinvent the Wheel." Mississippi State R&T Center/AFB National Working Seminar on Job Modification for Blind and Visually Impaired Persons, Orlando, FL, April 8-10, 1987.
- Brabyn, J.A. and Fowle, T. Presentation: "New Devices for the Blind." National Federation of the Blind, Western Regional Co Convention, Oakland, California, March 21, 1986.
- Brabyn, J.A. Presentation: "Research and Development on New Sensory Aids from the Smith-Kettlewell REC." California Council of the Blind Convention, Sacramento, California, April 12, 1986.
- Brabyn, J.A. A review of mobility aids and means of assessment. Invited paper presented at the North Atlantic Treaty Organization/National Science Foundation Conference, Lake Arrowhead, CA. September, 1984.
- Brabyn, J.A. A training program for blind electronics technicians. Radio interview, *National Public Radio*. San Francisco, CA, September, 1984.
- Brabyn, J.A. Practical sensory aids technology for the blind. Paper presented at *Burke Rehabilitation Conference*, White Plains, NY. October, 1983.
- Brabyn, J.A. Aids for the sensory impaired. Session Chairman, Conference of the *Rehabilitation Engineering Society of North America*, San Diego, CA. June, 1983.
- Brabyn, J.A. and Brabyn, L.A. Current developments in design and evaluation of aids for the blind. Seminar presented at the *American Foundation for the Blind*, New York, October, 1983.
- Brabyn, J.A. Artificial devices assisting the blind. Radio Interview, *KNBR*, San Francisco, CA. September, 1982.
- Brabyn, J.A. Computer applications for blind business vendors. Lecture presented at the *Tri-Regional Randolph-Sheppard Conference*, Sacramento, CA. September, 1982.
- Brabyn, J.A. Aids for people with sensory impairments. Session Chairman, *Conference on Rehabilitation Engineering*, Houston, TX. August, 1982.
- Brabyn, L.A. and Brabyn, J.A. The Talking Signs: An aid to navigation and orientation for the blind. Paper presented at the meeting of the *Western Psychological Association*, Sacramento, CA. April, 1982. 2.
- Brabyn, J.A. Review of sensory aids for the blind. Paper presented at the College of Engineering, University of California, Berkeley. February, 1981. Published in *Bioengineering Seminars - 1981*, Report 81-1.
- Brabyn, J.A. Application of electronic technology in rehabilitation engineering. Paper presented at the *Wescon Conference*, San Francisco, CA. September, 1981.
- Brabyn, J.A., Collins, C.C., and Kay, L. A wide bandwidth CTFM scanning sonar with tactile and acoustic display for persons with impaired vision (blind, divers, etc.). Paper presented at *Ultrasonic International Conference*, published in the Proceedings. Brighton, England, July 2, 1981.
- Brabyn, J.A. Artificial vision: A review of sensory aids for the blind. Invited paper presented at the *Annual Conference of the IEEE Engineering in Medicine and Biology Society*. Published in the Proceedings. Washington, D.C. September, 1980. Abstract in *IEEE Transactions on Biomedical Engineering*, 1980, 27, 532.

- Brabyn, J.A. Technological developments for deaf-blind persons. Paper presented at the meeting of the *Helen Keller Centennial Congress*. Boston, Mass. June, 1980.
- Brabyn, J.A. Rehabilitation engineering research for the blind. Paper presented at the *Rehabilitation Engineering Seminar* sponsored by the Rehabilitation Engineering Center, Stanford Children's Hospital, Palo Alto, Ca. March, 1980.
- Brabyn, J.A. Current and future research in blind mobility aids. Paper presented at the meeting of the *Interagency Conference on Rehabilitation Engineering*. Atlanta, Ga. August, 1979.
- Brabyn, J.A., Kay, L., and Strelow, E.R. Effects of simulated cue variations on an experienced sonicguide user. Paper presented at the meeting of the *Psychological Society*. Oxford, England, May, 1977.