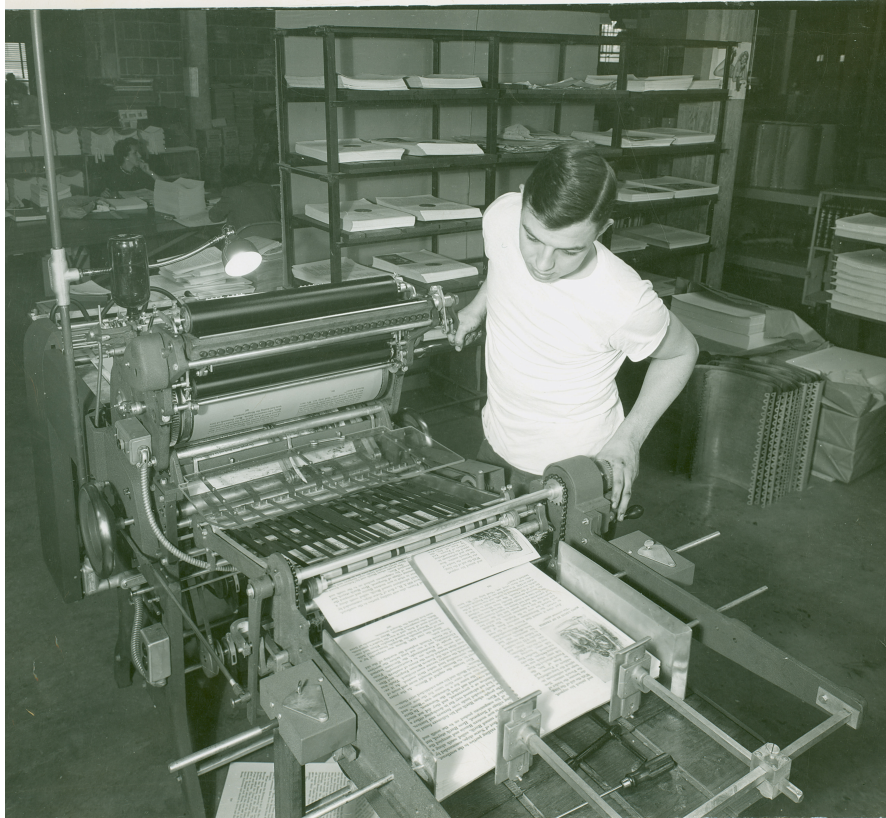


The 2023 Low Vision History Timeline



In 1947 APH began publication of large print books using Addressograph-Multigraph Multilith 2066 and 2014 Duplicators. Photo courtesy of American Printing House.

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Introduction

The Low Vision History Timeline is an ongoing project to chronicle important events in the history of the field which have contributed to or been critical in changing knowledge and practice. The authors request that readers submit events or topics they feel worthy of inclusion in the Timeline to gregory.goodrich@me.com. Your input will help ensure that the timeline represents a global view of visual impairment as well as a comprehensive one.

We also encourage readers to suggest changes to the Timeline. While we believe that items listed are both accurate and consequential, a few of our sources have relied on decades-old memories in the absence of more reliable documentation. We encourage any of you to contact the authors to propose changes.

While the Timeline is available as a free resource it should be appropriately referenced when material found in it is used in any presentation, print or electronic publication.

Inclusion Criteria:

For inclusion within the Timeline, events are those deemed to have directly affected how individuals with impaired vision are defined, treated, and function within society. These are inclusive of the individual's ability to be independent, as well as, societal laws and norms that enhance personal independence. Also listed are events enhancing the development of relevant professions inclusive of, but not limited to, education, medicine, optometry, psychology, rehabilitation, research, science, social work, and technology.

Before Common Era (BCE) Events

c 6000

- Earliest known manufactured mirrors (polished obsidian glass) from the Anatolian Civilization (Turkey).

c 3000 - 2800

- Earliest evidence of a cosmetic, artificial eye found near "The Burnt City" in the Sistan Desert (Iran). https://en.wikipedia.org/wiki/Shahr-e_Sukhteh

c 2575-2551

- Earliest known front and rear surface polished rock crystal lenses (found in Egyptian statues).

Common Era (CE) Events

c 325-1453

- Byzantine Empire organized 'state' aid for the blind including specially trained guides.

c 1270

- Marco Polo discovers elderly Chinese people using magnifying glasses for reading.

1760

- Charles Bonnet describes Charles Bonnet Syndrome also known as visual release hallucinations. https://en.wikipedia.org/wiki/Visual_release_hallucinations

1781

- First charity specifically benefiting the partially sighted when the York Emanuel Charity (England) was established granting annuities to ministers, their wives, widows, or children, blind, nearly blind, or "idiotic".

1784

- Valentin Haüy opens first school for the blind in Paris.

1791

- School for the blind (i.e. serving only blind children) opens in Liverpool, England.

1805

- The Norwich Asylum and School for the Blind was founded by Mr. Thomas Tawell a wealthy iron merchant. Mr. Tawell, who had been blind, partially recovered his sight and opened the school in Norwich, England.

1829

- Louis Braille publishes his invention of embossed dot code (Braille). <https://www.afb.org/about-afb/history/online-museums/life-and-legacy-louis-braille>

1851

- Hermann von Helmholtz invents the ophthalmoscope. <https://www.aao.org/biographies-detail/hermann-von-helmholtz-md>

1854

- Eduard Jaeger introduces Schrift-Scalen (type-scales) as a standardized way of measuring reading vision. Produced in several languages these booklets used continuous text (words) instead of single letters to assess vision. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1298236/pdf/taos00001-0371.pdf>

1862

- Herman Snellen (1834 - 1908), publishes his “Optotypes”; the first widely used visual acuity chart utilizing individual letters to assess distance vision. http://www.ergofoalmologie.nl/presentaties/6_Kooijman_ref_Colenbrander.pdf

1885

- The Spectacle Mission Society founded in London, England by Dr. Edward Waring with the mission of providing free spectacles for the poor and aged.

1887

- Anne Sullivan, a partially sighted graduate of Perkins Institute for the Blind, begins teaching Helen Keller. <https://www.perkins.org/history/people/anne-sullivan>

1893

- Elementary Education (Blind and Deaf Children) Act by British Parliament defined “blind” as “too blind to read the ordinary schoolbooks used by children”. <http://www.educationengland.org.uk/documents/acts/1893-elem-educ-blind-deaf-act.html>

1897

- Charles Prentice invents the typoscope. https://journals.lww.com/optvissci/Abstract/1969/11000/THE_TYPOSCOPE_BY_CHARLES_F_PRENTICE_.14.aspx

1907

- First issue of *Outlook for the Blind* published [later the *New Outlook for the Blind* and, now *Journal of Visual Impairment and Blindness*]. <https://archive.org/details/outlookforblind190709unse/page/n3>

1908

- London County Council (U.K.) initiates the Myope School, the world’s first class for children with low vision. <https://journals.sagepub.com/doi/pdf/10.1177/003591571300601644>
- National Society to Prevent Blindness (U.S.A.) founded.
- Moritz von Rohr, employed by Carl Zeiss, designed telescopic lens to correct high myopia.

1909

- The Blind Social Aid and Literary Union founded in London to “facilitate the employment of the blind and partially blind by giving publicity to their capacity and needs, and for the encouragement of social intercourse”.
https://archive.org/stream/chronologicalsur00comp/chronologicalsur00comp_djvu.txt

1910

- M. Von Rodgin publishes paper on telescopic and microscopic spectacles.
- Clear Type Publishing Company, founded by Robert Irwin, produce series of books in 36 point font. <https://en.wikipedia.org/wiki/Large-print>

1913

- Edward Allen, Director of Perkins Institute, opens first U.S. low vision class for children.
- Robert Irwin advocated teaching children in “conservation of vision” classes in Cleveland, Ohio.

1914

- C.H. Usher publishes on the inheritance of retinitis pigmentosa. <https://rarediseases.org/rare-diseases/usher-syndrome/>
- The Colne Society (Germany) founded a School Clinic where 588 children with “defective sight” were taught.

1915

- Concept of sight-saving, erroneously suggesting vision may be lost if used by low vision people, widely disseminated by the National Society for the Prevention of Blindness.

1916

- Olin Burritt, president of the American Association of Instructors of the Blind argues against use of aprons and high collars to prevent low vision children from using their eyes.

1917

- Rose Anna Leir, of Bristol, England, bequeathed a sum of money, the income of which was to be given primarily to “poor soldiers, native of Bristol, blinded or partially blinded during the “Great War 1914-18” (endowment disbanded in 1930 as there “were no suitable cases”).

1922

- P. Baunschwig reports on using prisms to aid cases of hemianopsia.

1924

- American Foundation for the Blind begins supplying telescopic lenses and referring to eye-care practitioners.

1925

- A.C. Snell and S. Sterling devise a “visual efficiency” scale expressed as a percentage of normal, adopted by the American Medical Association and later used as a criterion for disability by the Social Security Administration. It formed the basis of later “legal blindness” definitions. <https://www.ncbi.nlm.nih.gov/books/NBK207559/>

1928

- The Guild of Blind Gardeners (founded in 1900 in London) changes its name to the Guild for Promoting Gardening amongst the Blind and Partially Blind.

1930

- Ophthalmologists report use of vision does not further harm vision of people who are partially sighted.
- First publication of “Sight Saving Review”.
- H.J. Howard notes that to the “estimate of six million blind in the world should be added the much larger group with vision so seriously defective as to be handicapped vocationally, and threatened with ultimate loss of sight”.

1934

- Report of the Committee of Inquiry into problems relating to partially sighted children, London, U.K.
- American Medical Association defines “legal blindness” as “central visual acuity of 20/200 or less in the better eye with corrective glasses or central visual acuity of more than 20/200 if there is a visual field defect in which the peripheral field is contracted to such an extent that the widest diameter of the visual field subtends an angular distance no greater than 20 degrees in the better eye”. The same definition is widely used today. <https://www.ssa.gov/disability/professionals/bluebook/2.00-SpecialSensesandSpeech-Adult.htm>

1935

- William Feinbloom publishes “Introduction to the principles and practice of sub-normal vision correction” in *Journal of the American Optometric Association*.

1936

- Randolph Shepard Act passed in the United States enabling individuals classified as legally blind to operate vending facilities on federal property.

1938

- William Feinbloom reports on 500 low vision cases in *the American Journal of Optometry and Archives of the American Academy of Optometry*.
- Fredericka Bertram initiates first itinerant program for partially seeing children in U.S.

1940

- *Manual on the Use of the Standard Classification of Causes of Blindness* published by the American Foundation for the Blind and the National Society for the Prevention of Blindness.

1942

- American Optometric Association Department of Visual Adaptation and Rehabilitation opens.
- Alfred Kestenbaum develops the micro lens.
- First glaucoma detection program in U.S. by National Society to Prevent Blindness.

1947

- American Printing House for the Blind begins regular publication of large print books.

1948

- United States Veterans Administration opens blind rehabilitation center at Hines, Illinois.

1949

- “More people are blinded by definition than by any other cause.” statement by Lloyd Greenwood, a totally blind veteran and first executive director of the Blinded Veterans Association in *BVA Bulletin*.

1951

- Nicholas Harold Ridley invents the intraocular lens which greatly improved upon the field of view and cosmesis provided by spectacle prescriptions for congenital and late-onset cataracts.

1952

- International Council for Education of the Visually Handicapped (now International Council for Education of the Visually Impaired; ICEVI) formed.

1953

- First low vision clinics at the Industrial Home for the Blind (IHB; now Helen Keller Services for the Blind) and New York Association for the Blind (nicknamed “The Lighthouse”, now Lighthouse Guild) open. The Lighthouse service was under the clinical direction of Gerald Fonda while the service at IHB was under George Hellinger.
- Eleanor Faye and Gerald Fonda popularize the term ‘low vision’ with generally the same meaning as is used today. Low vision, as an ophthalmic term, had been in use since at least 1927, however the implied definitions were either overly broad (including almost any disorder of vision) or very restrictive (corresponding to what is now considered ultra-low vision). The term grew to replace a wide variety of terms that were used including nearly blind, defective sight, subnormal vision, partially blind, visually handicapped, partially sighted, and other terms.

1954

- First exhibition of low vision aids organized for International Congress of Ophthalmologists.

1955

- Berthold Lowenfeld publishes on psychological problems of low vision children.

1956

- Louise Sloan and A. Habel publish method for rating and prescribing low vision aids.
- Subnormal Vision Clinic established at the Maryland Workshop for the Blind.

1957

- Industrial Home for the Blind reports on its optical aids service. This report defined the basic model for what has become the standard low vision service.
- Richard Hoover presents functional definitions of blindness.
- C. Atkinson reports in *Lancet* on what was probably the first newspaper for the partially sighted.
- Optical Aids Clinics win U.S. government approval as component of vocational rehabilitation program.

1958

- American Optometric Association establishes Committee on Vision Care of the Aging.

1959

- American Optometric Association establishes Committee on Aid to the Partially Sighted.
- Howard Lewis reports on survey of institutions serving the “partially blind”.
- Louise Sloan first introduces standardized visual acuity charts with M notation.
<https://www.sciencedirect.com/topics/neuroscience/optotypes>

1960

- Norman Bier publishes *Correction of Subnormal Vision* (Buttersworth, London).
- First graduate of Orientation and Mobility (peripatology) program at Boston College.
- William Ludlam reports on the contact lens telescope.

1961

- Gerald Fonda evaluates telescopic spectacles for mobility.
- Subnormal Vision Aids recognized as subsection of Section on Contact Lenses (American Academy of Optometry).

1962

- First use of preferential looking techniques to assess visual acuity in infants by Robert L. Fantz and colleagues.

1963

- Gregory and Wallace report on a rare case of sight restoration following prolonged vision loss. http://www.richardgregory.org/papers/recovery_blind/recovery-from-early-blindness.pdf

1964

- Natalie Barraga publishes study on increased visual behavior of children and advocates sight utilization rather than sight saving. <https://archive.org/details/increasedvisual00nata>

1965

- Gerald Fonda publishes *Management of the Patient with Subnormal Vision*.

1966

- Conference on Aid to the Visually Limited held in the U.S. sponsored by the American Optometric Association.
https://archive.org/stream/proceedingsofc00amer/proceedingsofc00amer_djvu.txt

1967

- American Foundation for the Blind sponsors “Geriatric Blindness Conference”.

1968

- Organization for Social and Technical Information report notes overwhelming need for ophthalmic and optometric cooperation in vision rehabilitation.

1969

- Samuel Genensky and colleagues at Rand Corporation (Santa Monica, California) report on their development of closed-circuit television.

1970

- Natalie Barraga’s *Visual Efficiency Scale and Teacher’s Guide* published by APH.
- Loyal Apple and Marianne May’s *Distance Vision and Perceptual Training* published by AFB.
- Office of Education sponsors first national conference on low vision and mobility.
- National Accreditation Council publishes standards for production of reading materials.
- D. Korb publishes on preparing the visually handicapped driver.
- Eleanor Faye publishes *The Low Vision Patient: Clinical Experience with Adults and Children*.

1971

- White House Conference on Aging noted the need for expanded use of low vision optical aids (among other needs).

1972

- Low Vision Diplomate program established within American Academy of Optometry first diplomate awarded in 1973.
- Western Michigan University (U.S.A.) offers first required low vision course as part of orientation & mobility program.
- Low Vision Clinical Society founded in United States.
- Survey by National Society for the Prevention of Blindness identified 114 low vision facilities.

1973

- Rehabilitation Services Administration sponsors low vision conference: “Services of the Decade of the 70s”.
- Elliot Berson and colleagues introduce the “Pocketscope” night vision aid.

- Bertold Lowenfeld publishes *The Visually Handicapped Child in School*
- First itinerant service for low vision children “integrated” into mainstream schools in Australia.

1974

- American Optometric Association publishes *A Guide to the Care of the Low Vision Patient* edited by Julian D. Newman.
- Audrey Smith, a mobility instructor, demonstrates value of vision stimulation for mobility instruction with children.
- John Gill publishes first register of research on visual impairment.
- American Foundation for the Blind forms Ad Hoc Advisory Committee on Low Vision Services to outline components of viable low vision services.

1975

- Low Vision Division formed within the American Association of Workers for the Blind (now Association for Education and Rehabilitation of the Blind and Visually Impaired).
- American Academy of Ophthalmology forms Low Vision Section.
- Edwin Mehr and Alan Freids *Low Vision Care* published by Professional Press.
- Krister Inde and Örjan Bäckman publish *Visual Training with Optical Aids*.
- Eleanor Faye and Clare Hood publish *Clinical Low Vision* (2nd Edition).
- Veterans Administration sponsors Low Vision Mobility Conference at Kalamazoo, Michigan. <https://www.rehab.research.va.gov/jour/76/13/2/apple.pdf>
- American Association of Workers for the Blind, American Foundation for the Blind, & Blinded Veterans Association propose to U.S. House of Representatives coverage of low vision services in a national health insurance program or improvement of Medicare. Proposal not enacted.

1976

- Francis Koestler publishes *The Unseen Minority* (AFB Press).
- Judith Holcomb and Gregory Goodrich demonstrate eccentric viewing techniques can be learned by patients with age-related macular degeneration.
- Health and Safety Associates sponsor National Conference on Telescopic Devices and Driving.
- Ian Bailey and Jan Lovie introduced the logMAR scale as a measure of visual acuity and as a basis for letter-by-letter scoring; in the same year they introduced design principles for standardizing the task in visual acuity tests - standardizing the number of optotypes at each size and the ratios for spacing and size progression.
- American Medical Association and American Association of Motor Vehicle Administrators sponsor conference on telescopic devices and driving.
- Large print electronic calculators become available.
- American Academy of Ophthalmology establishes ad hoc low vision committee
- U.S. legislation provides funding to establish training programs for low vision personnel
- First low vision therapist degree training program, taught by Örjan Bäckman, opens at Stockholm Institute of Education, Sweden (became masters degree level in 2004)

- First international athletic events to include full medal status in games for athletes with low vision, distinct from athletes who were blind, held during Paralympic summer games in Toronto, Canada and Paralympic winter games in Örnsköldsvik, Sweden.

<http://ibsasport.org/history/>

1977

- The American Foundation for the Blind conducts and publishes a survey of low vision clinics.
- Low Vision Section established as a separate section within American Academy of Optometry.
- Rehabilitation Services Administration sponsors “Sensory Deficits and Aids Workshop”.
- National Eye Institute (U.S.A.) sponsors conference on use of low vision.

1978

- Ian Bailey began a series of 40 articles in *Optometry Monthly* (1978-83) introducing new methods for measuring the optical parameters of low vision aids and new scientific approaches to prescribing. This work established a practical scientific basis for the clinical prescribing of optical aids for low vision.
- Low Vision Conference sponsored by University of Uppsalla, Sweden organized by Krister Inde and Örjan Bäckman.
- Low Vision Section established within American Academy of Ophthalmology.
- Geoffrey Arden designs the Arden gratings, a system for testing contrast sensitivity in cases of visual disturbance, using printed sinusoidal gratings with tapered contrast at several spatial frequencies.

1979

- Michael Tobin and colleagues publish *Look and Think* and teacher’s handbook in England.
- Council of Citizens with Low Vision chartered, Grand Rapids, MI, Samuel Genensky, president (now Council of Citizens with Low Vision International).
- Scanning laser ophthalmoscopy, the use of confocal laser optical imaging technology to produce high resolution images of the retina, was invented by Robert H. Webb.

<http://retinatoday.com/2012/09/the-evolution-of-confocal-scanning-laser-ophthalmoscopy/>

1980

- First “Low Vision Ahead” Conference sponsored by Association for the Blind, Melbourne, Australia.
- Robert Dee Quillman writes the *Low Vision Training Manual* published by Western Michigan University.
- National Society to Prevent Blindness publishes *Vision Problems in the U.S.* current searchable data base <http://www.visionproblemsus.org>
- Michael Marmor and colleagues develop the Wide-Angle Mobility Light (WAML). [https://www.aaojournal.org/article/S0161-6420\(80\)35260-3/pdf](https://www.aaojournal.org/article/S0161-6420(80)35260-3/pdf)
- Framingham Eye Study Monograph published.

1981

- World Health Organization sponsors “The Use of Residual Vision by Visually Disabled Persons”.
- National Center for Health Statistics publish report *Prevalence of Selected Impairments: U.S.*
- National Accreditation Council establishes standards for low vision services.
- In a letter to the New England Journal of Medicine DeWitt Stetten, M.D. reports his difficulty, after developing age-related maculopathy, in finding low vision services even at the National Eye Institute.

1982

- M. Mainster, G. Timberlake, et al. report on retinal localization of scotoma by Scanning Laser Ophthalmoscopy (SLO). <https://www.ncbi.nlm.nih.gov/pubmed/7122056>
- The Electrical Council and the Partially Sighted Society of London report on lighting and low vision.
- Olga Overbury and colleagues report on the psychodynamics of low vision.
- James Maron and Ian Bailey report on visual factors and mobility performance.
- Sally Mangold publishes teacher’s guide to education of visually impaired to children.
- Jan Lovie-Kitchin and Kenneth J. Bowman edit *Senile Macular Degeneration*. (Buttersworth-Heinemann)
- North American Conference on Visually Handicapped Infants and Preschool Children held.

1983

- *Rehabilitation Optometry Journal (Journal of Vision Rehabilitation)* founded by Randall Jose.
- Randall Jose edits book *Understanding Low Vision* published by American Foundation for the Blind.
- Anne Corn publishes three-dimensional model of visual functioning.
- *Vision Research: A National Plan: 1983-87* by the National Eye Institute, includes Panel on Low Vision.
- United States Commission on Civil Rights publishes “Attitudes toward the handicapped”.
- Steven Whittaker, Gale Watson and colleagues develop the Pepper Test of reading skills.
- Low Vision Master’s degree in vision rehabilitation first offered by Pennsylvania College of Optometry.
- David Martin Regan and colleagues publish a series of visual acuity letter charts at different contrast levels.

1984

- Ian Bailey and Amanda Hall publish the U. C. Berkeley preferential looking test for infants.
- *Guidelines for the Production of Materials in Large Type* (L. Gardner & A. Corn) published by the Nat. Soc. for the Prevention of Blindness.
- John Gill publishes first *International Survey of Aids for the Visually Disabled*.

- Arthur Ginsburg publishes Vistech, a clinical test chart for measurements of the contrast sensitivity function. It used sinusoidal gratings at different contrasts for 5 different spatial frequencies.
- Microcomputers become widely used aids for people who are visually impaired.
- Dennis Kelleher publishes a personal view of driving with bioptics.
- Royal National Institute for the Blind publishes demographics of visually disabled population in U.K.
- Laurence Gardner and Anne Corn's position paper, *Low Vision: Topics of Concern*, is adopted by the Division on Visual Handicaps of the Council for Exceptional Children..

1985

- Corinne Kirchner publishes the resource guide *Data on Blindness and Visual Impairment in the U.S.*
- Gordon Legge publishes first two in a series of articles demonstrating tractability of studying low vision reading with rigorous psychophysical methods
- National Society to Prevent Blindness survey showing that blindness and blindness prevention are the third most important health concern of Americans.

1986

- Asilomar International Low Vision Conference in California sponsored by American Foundation for the Blind and Department of Veteran Affairs.
- Low Vision Conference held in Waterloo, Canada (University of Waterloo).
- Alfred Rosenbloom publishes *Vision and Aging: General and Clinical Perspectives*.
- Geraldine T. Scholl's *Foundations of Education for Blind and Visually Handicapped Children and Youth* is published.

1987

- Low Vision and Aging Conference, Washington, D.C.

1988

- Arthur Ginsburg publishes the Vistech clinical contrast sensitivity test, a wall-mounted chart with sinusoidal gratings printed with varying contrasts. The test was quickly adopted by several prominent low vision clinicians.
- International Low Vision Conference, Beverly Hills, California, sponsored by American Foundation for the Blind and Department of Veterans Affairs.
- First publication of *Integracion* a journal on visual impairment and blindness by O.N.C.E., in Madrid.
- Low Vision Research Group (LVRG) forms.
- Denis Pelli, John Robson and Arnold Wilkins publish the Pelli-Robson Test, a letter chart for measuring peak contrast sensitivity, with systematically varied contrast of letters of constant size.
- Aries Arditi elucidates the geometric basis of binocular visual field defects, describes how bilateral scotomas cause blindness to volumes of visual space, and puts forth the volume visual field as a foundation for functional perimetry.
https://www.researchgate.net/publication/282661495_The_volume_visual_field_A_basis_for_functional_perimetry

1989

- LOVNET (Low-Vision Research Network) founded by G.E. Legge and D.H. Parish.

1990

- Americans with Disabilities Act signed into law.
- AIDS and Low Vision Convenience, San Francisco, California sponsored by American Foundation for the Blind.
- International Conference, " Low Vision Ahead II" sponsored by Association for the Blind, Melbourne.

1991

- World Health Organization sponsors conference on "Prevention of Blindness and Remediation of Low Vision in Children", in Gambia.
- Paul Freeman and Randy Jose publish *The Art and Practice of Low Vision*.

1992

- Division 7, AER, publishes Body of Knowledge, Standards of Practice, & Ethics for Low Vision Therapists.
- The World Health Organization holds a Consultation on the Management of Low Vision in Children in Bangkok, Thailand.

1993

- The International Low Vision Conference held in Groningen, The Netherlands, sponsored by Visio and the University of Groningen.
- First planning meeting held to form International Society for Low-vision Research and Rehabilitation (ISLRR).
- The American Academy of Ophthalmology establishes the Shared Interest Group for Low Vision.

1994

- National Eye Institute Low Vision Panel notes "legal blindness" is "an old-fashioned concept, rooted in the premise that vision much below normal is useless".
- Visionics dispenses head-mounted video low vision enhancement system (LVES) developed by Robert Massof.
- Pan American Health Organization sponsor "Low Vision Regional Plan for Latin America" in Bogotá.
- Gordon Legge and J. Stephen Mansfield develop MNREAD, a practical psychophysically grounded reading test for low vision. <http://legge.psych.umn.edu/mnread>

1995

- Joint Commission on Allied Health Personnel in Ophthalmology publish criteria for subspecialty "Assisting in Low Vision".

1996

- International Society for Low-vision Research and Rehabilitation (ISLRR) officially incorporated in Amsterdam.
- First publication of *Journal of Videology* (later to become *Visual Impairment Research*).
- Vision 96, (ISLRR) International Low Vision Conference sponsored by O.N.C.E. held in Madrid, Spain.
- The World Health Organization holds a Consultation on the Management of Low Vision in the Elderly, Madrid, Spain.

1997

- Association for Education and Rehabilitation of the Blind and Visually Impaired adopts low vision certification examination & standards; 1st Low Vision Therapists certified.

1998

- First Low Vision Education Day seminar held in conjunction with American Academy of Ophthalmology.
- EuroSight 98, European (ISLRR) conference: Varese, Italy.

1999

- Vision 99 (ISLRR) International Low Vision Conference, sponsored by Lighthouse International, New York.
- National Eye Institute's (U.S.A.) National Eye Health Education Program on Low Vision launched.
- Vision 2020 Initiative: The Right to Sight announced by the World Health Organization and the International Agency for the Prevention of Blindness.
- First publication of *Visual Impairment Research* (VIR) official journal of the International Society for Low-vision Research and Rehabilitation.

2000

- ISLRR EuroSight-2000 - The 4th European Low Vision Conference, Veldhoven, the Netherlands.
- Academy for Certification of Vision Rehabilitation and Education Professionals (ACVREP) is established.

2001

- BiOptic Driving Network established. www.biopticdriving.org
- 31 States issue driver licenses to select low vision individuals who use BiOptic telescopic lens systems. Collectively over 4,000 such drivers in the United States.
- Robert Massof and Lorraine Lidoff publish *Issues in Low Vision Rehabilitation: Service Delivery, Policy, and Funding*.

2002

- Vision 2002 (ISLRR) International Low Vision Conference, sponsored by Sahlgrenska University Hospital & Goteborg University: Gothenburg, Sweden.
- ISLRR EuroSight-2002, Stressa, Italy.

- Medicare (United States) publishes Program Memorandum defining visual rehabilitation services that cannot automatically be denied coverage by local carriers.
- First experimental electronic retinal implant prosthesis surgically implanted by Mark Humayun at Johns Hopkins.

2003

- Michael May, blind for 40 years, regains vision after corneal and limbal stem cell transplant.
- Low Vision Resource Center, Hong Kong established to distribute low cost devices to developing countries.

2004

- Bioptic Driving Conference, London.
- International Low Vision Symposium, Hong Kong.
- Oslo Workshop “Toward a Reduction in the Global Impact of Low Vision”, Norway, sponsored by Lighthouse International and ISLRR.
- J. Sunness and colleagues report on the use of functional magnetic resonance imaging (fMRI) to study reorganization of visual cortex in a person with macular degeneration.

2005

- Vision 2005 (ISLRR) International Low Vision Conference, sponsored by Royal National Institute of the Blind, London.
- Oslo Workshop Document “Toward a Reduction in the Global Impact of Low Vision”, endorsed by key organizations including World Blind Union, Lions World Services for the Blind, International Council for Education of the Visually Impaired.

2006

- Center for Medicare and Medicaid Services initiates low vision demonstration project in New York City (6 Burroughs), Atlanta, Kansas, New Hampshire, North Carolina, and Washington State.
- World Sight Day theme of Low Vision.
- Global Campaign on Education for All Children with Visual Impairment begun.

2008

- Vision 2008 (ISLRR) International Low Vision Conference, Montreal, sponsored by École d’optométrie, Université de Montréal and Institut Nazareth & Louis-Braille.
- Research on American troops with combat- and non-combat related traumatic brain injury sustained in Afghanistan and Iraq highlight vision loss and visual dysfunction associated with all severities of brain injury.
https://usatoday30.usatoday.com/printedition/news/20071114/1a_cover14.art.htm

2010

- First European Congress on Visual Impairment, Valladolid, Spain, sponsored by the Spanish Association of Professionals of People with Visual Impairment and ISLRR

- *Investigative Ophthalmology and Vision Science* (official journal of ARVO) announces new low vision section. <https://www.arvo.org/globalassets/arvo/journals-and-publications/arvonews/pdfs/arvonews---summer-fall-2010.pdf>

2011

- Vision 2011 (ISLRR) International Low Vision Conference, Kuala Lumpur, Malaysia, sponsored by Malaysian Association for the Blind and Tun Hussein Onn National Eye Hospital .

2013

- World Health Organization: WHO Action Plan 2014-2019 “To reduce avoidable visual impairment as a global public health problem and secure access to rehabilitation services for the visually impaired. <https://www.iapb.org/resources/who-global-action-plan-2014-2019/>
- World Intellectual Property Organization adopts Marrakesh Treaty to facilitate access to published works for persons who are blind, visually impaired, or otherwise print disabled. <https://www.wipo.int/treaties/en/ip/marrakesh/>

2014

- Vision 2014 (ISLRR) International Low Vision Conference, Melbourne, Australia, sponsored by Vision Australia.

2017

- Vision 2017 (ISLRR) International Low Vision Conference, The Hague, Netherlands, sponsored by Vision 2020 the Netherlands, the Dutch Society of Optometrists, and Dedicon on behalf of the Daisy Consortium.

2022

- Vision 2020 (ISLRR) International Low Vision Conference, Dublin, Ireland, sponsored by Vision Impaired Providers Alliance (delayed from 2020 due to Covid-19 pandemic).

2023

- Vision 2023 (ISLRR) International Low Vision Conference, Denver, Colorado, sponsored by Department of Ophthalmology, University of Colorado and Anchor Center for Blind Children, Denver, Colorado.

To be continued...

Your comments and suggestions are needed to allow the Timeline to offer all seminal events in low vision. To offer suggestions please email them to:

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