Douglas Boynton Quine, Ph.D.

United States citizen

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Education

Ph.D.	Neurobiology and Behavior	Cornell University	1979
B.A.	Biology	Princeton University	1973

Professional Employment and Research

2017- *Health Science Specialist* Veterans Affairs CT Healthcare, West Haven CT: Scientist working with multiple investigators including developing standardized laboratory test names and results for clinical and epidemiological work (3 co-authored papers), Headache Center of Excellence data analysis, and cardiology; research and grant support.

2016-2017 *Affiliate*: Veterans Affairs CT Healthcare, West Haven CT: Scientist developing standardized laboratory test names and results reporting for clinical and epidemiological work.

2015-2017 *Research Associate*: REDS-III Site Coordinator, Bridgeport Hospital, Bridgeport CT: Scientist on international REDS-III (Recipient Epidemiology and Donor Study-III) sponsored by the National Heart, Lung, and Blood Institute (NHLBI) of the NIH to improve blood transfusion benefits and reduce risks.

2010-2015 *Consultant*, Triskelion Ltd: Consulting services in multi-disciplinary scientific problem solving, innovation, scientific research, process improvement, homeland security, expert testimony, patents, postal automation, intellectual property, program management, and publishing. Domestic and international clients include: Arcade Marketing, Pitney Bowes, EE Times, WilmerHale, Harvard University Press, Swidler & Berlin, and an elite Connecticut hedge fund.

2006-2010 *Fellow*, Technology Laboratory, Pitney Bowes Advanced Concepts And Technology, Shelton CT: Secure Mail subject matter expert involved in identification, qualification, and evaluation of technologies as well as the design of secure mail screening solutions. Invented, designed, and developed innovative solutions leading to new products and business opportunities.

2002-2006 *Principal Engineer*, System Laboratory, Pitney Bowes Advanced Concepts And Technology, Shelton CT: Applied research, design, and development of new SafeMail system to detect and warn of biothreats in the mail while isolating the mail to reduce contamination and protect people and property. Coordinated application to U.S. Department of Homeland Security resulting in designation of system as a Qualified Anti-Terrorism Technology.

2000-2002 *Product Guru, Digital Document Delivery,* docSense, powered by Pitney Bowes, Danbury, CT: Product management and development of digital document delivery channels (including Internet) for e-commerce, electronic bill presentment & payment and electronic statement presentment. Coordinate with partners and develop new concepts for e-commerce, Internet business and email systems; coordination with customers, vendors, and industry analysts.

1993-2000 *Program Manager for OEM and Finishing Products,* Pitney Bowes Production Mail, Danbury, CT: Manage mail sorting equipment from OEM vendors, manage development of mail sorting equipment, coordinate sales, marketing, service, and engineering efforts

1990-1993 *Senior Staff Engineer*, Martin Marietta Postal Systems
USPS automation systems requirements design, analysis, test, & verification
Barcode reader and optical character reader technology analysis

1988-1990 *Staff Engineer*, Martin Marietta Data Systems, Orlando FL

Parallel processing for postal imaging applications
Delivery Bar Code Sorter system design, analysis, test, and verification

1987-1988 *Affiliate Associate Professor*, Ecology, Ethology, & Evolution, Univ. Illinois
Sensory systems of animals

1984-1988 *Associate Professional Scientist*, Wildlife, Illinois Natural History Survey
Radar studies of bird migration to warn aircraft of bird hazards

1983-1984 *Research Assistant Professor*, Pharmacology, Tulane Medical School
Vestibular pharmacology

1983-1984 *Adjunct Assistant Professor*, Otolaryngology, Tulane Medical School
Vestibular pharmacology

1982-1983 *Visiting Assistant Professor*, Psychology, Tulane University
Animal behavior

1982-1983 *Research Instructor*, Pharmacology, Tulane Medical School
Auditory pharmacology; neurotransmitters

1980-1982 *Research Associate*, Physiology & Biophysics, Dalhousie University
Frequency modulation channels in human hearing
Hearing disorders in Multiple Sclerosis

1979-1980 *Post Doctoral Fellow* (with DM Regan), Psychology, Dalhousie University
Hearing disorders in Multiple Sclerosis, Brainstem Auditory Evoked Potentials

1976-1979 *Ph.D. Research* (with WT Keeton), Neurobiology & Behavior, Cornell Univ.
Infrasound detection and navigation by the homing pigeon

1974-1976 *Graduate Research* (with WT Keeton), Neurobiology & Behavior, Cornell Univ.
Olfactory cues in orientation by pigeons

1973-1974 *Acoustical Consultant* (with P Marler)
Field Research Center in Ecology and Ethology, The Rockefeller University
Acoustic factors in bird song evolution in temperate and tropical habitats

1972-1973 *Undergraduate Thesis Research* (with M Konishi), Biology, Princeton University
Frequency discrimination and angular discrimination in the barn owl (*Tyto alba*)

1968-1969 *Independent research project* (with R DeSanctis)
Massachusetts General Hospital & Roxbury Latin School
Heart valve prostheses & Open heart surgery

1967-1968 *Independent research project*, Retina Foundation/ Mass Eye and Ear Infirmary
Polarized light detection for the early diagnosis of visual disorders in humans

Teaching

2015 June Modern Postal History: 50 Years of Automation and Change (Summer Seminar Two Day Course) American Philatelic Society, Bellefonte, Pennsylvania

1988 spring philosophy | Systems and Behavior (Bio 390B)
Affiliate Associate Professor, Ecology, Ethology, & Evolution, Univ. Illinois

1983 fall Special Topics in Animal Behavior (graduate level)
Visiting Assistant Professor, Psychology, Tulane University

1983 spring Sensory World of Animals (honors course)
Visiting Assistant Professor, Psychology, Tulane University

1977-1978 Distinguished lecture series in biocommunication

(K Adler, J Adler, J Goodall, C Sagan, B Holldobler, J Lettvin, & R Payne)
Teaching Assistant, Neurobiology and Behavior, Cornell University

1975, 1976 Avian navigation seminar (elective in biology)
Teaching Assistant, Neurobiology and Behavior, Cornell University

1975, 1976 Scientific writing seminar (elective in biology)
Teaching Assistant, Neurobiology and Behavior, Cornell University

1974-1976 Introductory biology laboratory for biology majors
Teaching Assistant, Neurobiology and Behavior, Cornell University

Professional Consulting

1987,1988 Consultant, Willard Airport, Savoy, IL - bird hazards

1978-1979 Scientific and Photographic Consultant, WW Norton Inc., New York
WT Keeton: *Biological Sciences* (3rd edition)

1972-1973 Safety Consultant, Occupational Health & Safety, Princeton University

Books

2008a. Quine, W. V. *Confessions of a Confirmed Extensionalist and Other Essays* (Dagfinn Føllesdal & Douglas B. Quine, editors), Cambridge: Belknap Press, Harvard University Press, xi + 521 pp.

2008b. Quine, W. V. *Quine in Dialogue* (Dagfinn Føllesdal & Douglas B. Quine, editors), Cambridge: Belknap Press, Harvard University Press, xi + 378 pp.

Scientific publications: Papers

1974 Quine DB, Konishi M. "Absolute frequency discrimination in the barn owl." *J. Comparative Physiology 93*: 347-360

1977 Marten K, Quine DB, Marler P. "Sound transmission and its significance for animal vocalizations. II. Tropical forest habitats." *Behavioral Ecology & Sociobiol. 2*: 291-302

1979 Kreithen ML, Quine DB. "Infrasound detection by the homing pigeon: A behavioral audiogram." *J. Comparative Physiology 129*: 1-4

1979 Quine DB. *Infrasound detection and frequency discrimination in the homing pigeon*. Ph.D. Dissertation, Cornell University

1979 Quine DB. "Birds and infrasound." *J. Acoustical Society America 66*: 603

1981 Quine DB, Kreithen ML. "Frequency shift discrimination: Can pigeons locate infrasounds by Doppler shifts?" *J. Comparative Physiology 141*: 153-l55

1982 Quine DB. "Infrasounds: A potential navigational cue for homing pigeons." pp. 373-376 in F. Papi and H. G. Wallraff (eds), *Avian Navigation* Springer Verlag: Berlin & Heidelberg

1983 Weldon PR, Murray TJ, Quine DB. "Hearing changes in Multiple Sclerosis." *J. Neurosurgical Nursing 15 (2)*: 98-103

1983 Quine DB, Regan D, Murray TJ. "Delayed auditory tone perception in Multiple Sclerosis." *Canadian J. Neurological Sciences. l0*: 183-186

1984 Quine DB, Regan D, Beverley KI, Murray TJ. "Multiple Sclerosis patients experience hearing loss specifically for shifts of tone frequency." *Archives of Neurology 41*: 506-509

1984 Bryant GM, Cronin-Schreiber R Alexander A, Norris CH, Quine, DB, Guth PS. "The potentiation of ototoxicity when AOAA and kanamycin are co-administered." *Hearing Research 15*: 173-178

1984 Quine DB, Regan D, Murray TJ. "Degraded discrimination between speechlike sounds by patients with

Multiple Sclerosis and Friedreich's Ataxia." *Brain 107*: 1113-1122

1985 Quine DB, Guth SL, Norris CH. "Computer analysis of vestibular responses to putative neurotransmitters." *J. Neuroscience Methods 14*: 241-246

1985 Reed HT, Meltzer J, Crews P, Norris CH, Quine DB, Guth PS. "Amino-oxyacetic acid as a palliative in tinnitus." *Archives of Otolaryngology 111*: 803-805

1986 Guth PS, Norris CE, Guth SL, Quine DB, Williams HW. "Cholinomimetics mimic efferent effects of semicircular canal afferent activity in the frog." *Acta Otolaryngology (Stockholm) 102*: 186-194

1987 DeFusco RP, Larkin R, Quine DB. "Bird hazard warning using Next Generation Weather Radar." *18th Bird Strike Europe Symposium Proceedings*., Copenhagen, Denmark, pp. 135-148.

1988 Larkin R, Quine DB. "Recognizing bird targets on Next Generation Weather Radar." *19th Bird Strike Europe Symposium Proceedings*., Madrid, Spain.

2015 Quine WV (Quine, DB editor). "Levels of Abstraction" in *Quine and His Place in History,* Palgrave Macmillan *(*Conference at University of Glasgow, Scotland, December, 2014)

2015 Lodge A, Leary RA, Quine DB. "Observations on the Contribution of W. V. Quine to Unified Science Theory" in *Quine and His Place in History,* Palgrave Macmillan *(*Conference at University of Glasgow, Scotland, December, 2014)

2018 Hauser RG, Quine DB, Ryder A. "LabRS: A Rosetta Stone for Retrospective Standardization of Clinical Laboratory Test Results" *J. American Medical Information Association (JAMIA)* Feb 1;25(2):121-126.

2018 Hauser RG, Quine DB, Ryder A, Campbell S. "Unit Conversions Between LOINC Codes." *J. American Medical Information Association (JAMIA)* Feb 1;25(2):192-196.

2020 Bhargava A, Kim T, Quine DB, Hauser RG. "A 20-Year Evaluation of LOINC in the United States' Largest Integrated Health System." *Archives of Pathology and Lab Medicine 144 (April):* 478-484

2021 Schindler EAD, Cooper V, Quine DB, Fenton BF, Wright DA, Weil MJ, Sico JJ. "You will eat shoe polish if you think it would help"— Familiar and lesser-known themes identified from mixed methods analysis of a cluster headache survey." *Headache 61 (2): 318-328*

Scientific publications: Abstracts

1978 Quine DB. "Infrasound detection and ultralow frequency discrimination in the homing pigeon." *J. Acoustical. Society Amer. 63 (Sl)*: S75 (FF3)

1979 Quine DB. "Ultralow frequency discrimination: Can homing pigeons localize infrasounds by Doppler shifts? *J. Acoustical Society Amer. 65 (Sl)*: S39 (016)

1980 Quine DB. "Many octaves below human hearing: Homing pigeons detect and discriminate infrasounds." *Abstracts of papers of the 147th national meeting, American Association for the Advancement of Science*, Toronto, Canada. 132 (307)

1981 Quine DB. "Fluctuations in sound propagation: Implications for animal vocalizations." *J. Acoustical Society Amer 69 (Sl)*: S100-101 (SS8)

1981 Quine DB., Regan D, Murray TJ. "Delayed auditory tone perception and delayed BEP's in Multiple Sclerosis patients." *J. Acoustical Society Amer 69 (Sl)*: S106 (UU14)

1981 Quine DB, Regan D, Murray TJ, Beverley KI. "Specific loss of sensitivity to frequency modulation in Multiple Sclerosis (MS)." *J. Acoustical Society Amer 69 (Sl)*: S106 (UU13)

1981 Quine DB. "Fluctuations in sound propagation: Implications for animal communication." *Abstracts XVIIth International Ethological Conference*, Oxford, England

1983 Quine DB, Waldvogel JA. "Olfactory navigation of pigeons (*Columba livia*): Effects of odorous air currents in America & Italy." *Abstracts of the Animal Behavior Society 1983 Meeting*, Lewisburg PA.

1984 Quine DB, Guth SL, Norris CH. "Computer analysis of vestibular responses to putative neurotransmitters." *Abstracts of the Seventh Midwinter Meeting*. Association for Research in Otolaryngology, St. Petersburg, FL

1985 Guth PS, Quine DB. "Cholinergic pharmacology of frog vestibular neurons." *Abstracts of the 8th Midwinter Meeting*. Association for Research in Otolaryngology, Clearwater, FL

1986 Guth PS, Reed HT, Meltzer J, Norris CH, Quine DB. "The trial of amino-oxyacetic acid as a palliative in tinnitus." *Abstracts of the Ninth Midwinter Meeting*, Association for Research in Otolaryngology, Clearwater, FL

1986 Quine DB, Larkin RP, Mueller CM. "Birds migrating in 'Windrows' at night over Kansas." *Abstracts of XIX Congressus Internationalis Ornithologicus*, Ottawa, Canada.

1987 Norris CH, Guth PS, Quine DB. "The effects of histamine on the semicircular canal of the frog." *Abstracts of the Tenth Midwinter Meeting*. Association for Research in Otolaryngology, Clearwater, FL

1987 Larkin RP, Quine DB, Mueller CM. "Extensive (40 km) waves of migrating birds over Kansas." *Abstracts of the Animal Behavior Society 1987 Meeting*., Williamstown, MA.

1987 Guth PS, Norris CH, Quine DB, Housley GD. "Does histamine have a role in the semicircular canal of the frog?" *Society Neuroscience Abstracts 13*: 636 (Abstract #179.9).

Postal Automation Published Chapters, Papers, and Notes

1987 Quine DB. "Bar coding of handwritten and incorrect addresses." *Modern Postal History Journal 5 (4)*: 34-35

1988 Quine DB. "Bar code questions answered." *Modern Postal History Journal 6(4)*: 48-49

1988 Quine DB. "Decoding a partial bar code: A diversion for amateur mathematicians and cryptanalysts." *The American Philatelist (Nov. 1988)*: 1090-1092

1988 Quine DB. "Half/full bar code types appearing on domestic mail 1983-1987." *Modern Postal History Journal 6(4)*: 45-47

1988 Quine DB. "OCR Errors 1983-l987: Half a Decade of Human and Machine Errors." *MILCOPEX*

1989 Quine DB. "Bar code types appearing on the face of domestic mail." *Modern Postal History Journal 7(4)*: 59-61

1989 Quine DB. "Ident (literature review)" *Modern Postal History Journal 7(3)*: 35-36

1989 Quine DB. "New Technology OCR's and Postnet Bar Code Errors." *U.S. Specialist 60 (Mar)* 154-156

1989 Quine DB. "The Evolution of an Exhibitor." *The Philatelic Exhibitor (Jan. 1989)*: 16-17; reprinted in Princeton University '73 *Summer News: Bits and Pieces from the Class of 1973*.

1990 Quine DB. "International Journal of Research and Engineering, Postal Applications (literature review)" *U.S. Specialist 61 (June)*: 361-362

1990 Quine DB. "Orlando, FL Missent Marking." *Modern Postal History Journal 8(1)*: 9

1990 Quine DB. "*Postal Buddy* Change-of-Address Station Prints Stamped Postal Cards and Labels On Demand." *U.S. Specialist 61 (Oct)*: 542-561

1990 Quine DB. "Orlando, FL Missent Marking." *Modern Postal History Journal 8(1)*: 9

1991 Quine DB. "Letters to Foreign Addresses Mistakenly Barcoded with US ZIP Codes." *Modern Postal History Journal 9(2)*: 36-37

1991 Quine DB. "Philosophical Quine Commemorated by San Marino Postmark." *Linn's Stamp News (Aug. 19 91)*: 14

1991 Quine DB. "*Postal Buddy* Change-of-Address Station Prints Stamped Postal Cards and Labels On Demand." reprinted in *United States Postal Service*. 1991. "New Customer Address Change System: Solicitation 104230-91-A-0151"

1991 Quine DB. "Updated *Postal Buddy* Program Expands Into 1991." *U.S. Specialist 62 (May)*: 263-275

1993 Hines T & Quine DB. "Bar Coded Forwarding Labels for Overseas Addresses." *Modern Postal History Journal 11 (2)*: 29-30

1993 Quine DB. "Modern Postal History: Treasures Waiting to Be Found." *U.S. Specialist 64 (Oct)*: 461-463

1994 Quine DB. "Computers are Invaluable for Philately." *U.S. Stamps & Postal History (Nov-Dec 1994) 36-38*

1998a Quine, DB. "Intentional USPS POSTNET Barcodes On International Mail", *IDENT: Journal of the Postal Mechanisation Study Circle* 21 (4): 56-68

1998b Quine, DB. "Cover Has Special Delivery Disguise", *Linn's Stamp News* (November 30, 1998): 2

1999 Quine, DB. "Modern Postal History Update: Barcodes and Resources" *U.S. Specialist 70 (Oct)*: 474-475

2000 Quine, DB. "PC Postage Meter Launch at National Postal Forum, Chicago, Illinois", *IDENT: Journal of the Postal Mechanisation Study Circle* 23 (1): 13-16

2003a Quine, DB. "Identifier / Rate Codes for Automation Mail", *IDENT: Journal of the Postal Mechanisation Study Circle* 26 (2): 40-44

2003b Quine, DB. "Windows Into Postal Automation: Heads USA, Tails UK, and Topsy-Turvey Barcodes", *U.S. Specialist 74 (Dec)*: 561-565

2004 Quine, DB. "All the Contemporary Handstamped Auxiliary Markings of Grand Rapids, Michigan." *Auxiliary Markings 1(4) (Oct.):* 2 – 3

2004 McCallum, J. & Quine, DB. "Postnet Codes." (USPS 11 digit Postnet codes for the United Kingdom)", *Postal Mechanisation Study Circle Newsletter* 28 (11): 71

2006 Quine, DB. "Returned To Sender 2005: No Mail Receptacle." *Auxiliary Markings 3(1) (Jan.):* 2-7

2007a Quine, DB. "'Exceptional Address Format' auxiliary marking first report." *Auxiliary Markings 4(3) (Jul.):* 13

2007b Quine, DB. "An Unusual Marking." *Auxiliary Markings 4(3) (Jul.):* 11

2008a Quine, DB. "Received in Damaged Condition." Auxiliary Markings 5(1) (Jan.): 5

2008b Quine, DB. "Centennial of a Philatelic Philosopher." Philatelic Literature Review: 57 (4): 326-337

2009a Quine, DB. "Harvard University Mourning Cover.*" Mourning Notes 3(2): 13*

2009b Quine, DB. "Ernest A. Mosher memorial cover.*" Mourning Notes 3(2): 13*

2009c Anonymous and Douglas B. Quine. 2009c. "Barcoded Missents.*" Auxiliary Markings VI(3) (July.):* 7

2012a Quine DB. "Tip of the Iceberg: An Ongoing International Modern Postal History Barcode Puzzle." *U.S. Specialist 83 (June)*: 259-261

2012b Quine DB. 2012b. "Isle of Man 'Mourning Cover' Illustrated on Stamp." *Mourning Notes 6 (1)*: p. 4

2012c Quine DB. 2012c. "Return to Sender Envelopes from San Francisco." *Auxiliary Markings IX (3):* (July): p. 7

2012d Quine DB. 2012d. "Tip of the Iceberg: An Ongoing International Modern Postal History Barcode Puzzle." *IDENT : Journal of the Postal Mechanisation Study Circle 35 (2) : 26-43*

2013a Quine, DB. " End of One Barcoding Era, Beginning of Another?" *Auxiliary Markings* 10 (2) (Apr.): 2

2013b McCallum, J. & Quine, DB. "Barcodes: US Intelligent Mail Barcode.", *Postal Mechanisation Study Circle Newsletter* 37 (6): 36-37

2013c Quine, DB. "USA: 21st Century Sanitization of Mail.", *Pratique: The Newsletter of the Disinfected Mail Study Circle XXXVII (3):* 98-100

2014a Quine DB. "Letter Mail USPS Barcode Reader for Modern Postal Historians Finds Address Barcocde Error." *U.S. Specialist 85 (February)*: 78-83

2014b Quine DB. "Hazards of Industrial Trade Shows." *Meter Stamp Society Quarterly Bulletin 66 (Summer) 6-7*

2015 Quine DB.. "The American Family Association - the Harvey Milk Stamp 'REFUSED' and 'RTS'" *Auxiliary Markings* 12 (1) (Jan.): 1

2016a Quine DB. "An Early First Day Cover Noted to be 'Without Contents'" *Auxiliary Markings* 13 (1) (Jan.): 3

2016b Quine DB. "Expediting the Movement of a Letter Through the Mails" *Auxiliary Markings* 13 (2) (Apr.): 3

2016c Quine DB. "POSTNET Barcodes: Enablers of Letter / Flat Mail Postal Automation, 1982 - 2013" Chapter 13: pp. 201-221 in (A. Wawrukiewicz, editor) *Insights into U.S. Postal History, 1855 – 2016,* American Philatelic Society Press

2016d. Quine DB. "How I Became A Stamp Collector." *American Philatelist 130* (8) Aug: 904

2016. Wawrukiewicz A, Quine DB, Johnson J. "Inkjet Information Markings on Undeliverable Mail" *Auxiliary Markings* 13 (4) (Oct.): 7

2016e. Quine DB. "Evolving Postal Markings on U.S. Letter Mail: Reading the Stories that Envelopes Tell" *The Meter Stamp Quarterly Bulletin* (Winter 2016) 68: 4 pp 1, 4-5

2017a. Quine DB. "Postage Meter Indicia for Marketing" *The Meter Stamp Quarterly Bulletin* (Winter 2017) 69: 6

2017b. Quine DB. "Postage Meter Indicia for Daily Wear" *The Meter Stamp Quarterly Bulletin* (Winter 2017) 69: 10

2018. Farrington M, Quine DB. "Response to 'Misaddressed Letter with Important USPS Warning'" *Auxiliary Markings 15 (4) (Oct.):* 1

2019a. Quine DB. "Traditional and innovative geographical addressing schemes." *IDENT: Journal of the Postal Mechanisation Study Circle 42 (1) : 6-7*

2019b. Quine DB. "USPS Informed Delivery and modern postal history." *IDENT: Journal of the Postal Mechanisation Study Circle 42 (1) : 8-10*

2019c. Quine DB. "A 2019 United States 'Mourning Cover'." *Mourning Notes 13 (1-2)*: 25

2020a. Quine DB. "USPS unique Intelligent Mail Barcodes and the exception that proves the rule." *IDENT: Journal of the Postal Mechanisation Study Circle 43 (2): 45-48*

2020b. Quine DB. "Wrong Way Cover." *The Meter Stamp Quarterly Bulletin* (Summer 2020) 72: 8

2021a. Quine DB. "Unauthorized Change of Address May Explain "IN DISPUTE" PARS Label" *Auxiliary Markings 18 (2) (Apr.):* 4-5

2021b. Quine DB. "Living With General Delivery" *Auxiliary Markings 18 (4) (Oct.):* 12

United States Patents (50 patents)

- #6,717,957 *Method for delivering information in a closed loop multimedia system*
- #6,782,415 *Business-to-employee messaging system*
- #6,795,376 *Method for displaying an environmentally modulated expiration date*
- #6,832,246 *Dynamic electronic forwarding system*
- #6,839,738 *System and method for cleansing addresses for electronic messages* (Quine, Schumacher)
- #6,865,561 "*Closed system meter having address correction* (Allport, Kelly, Nicholls, Capelli, Quine)
- #6,895,427 *System and method for cleansing addresses for electronic messages* (Quine, Schumacher)
- #6,957,248 *System and method for forwarding electronic messages* (Douglas Quine, Alexander Quine)
- #6,985,408 *Method for displaying an environmentally modulated expiration date*
- #6,988,129 *Method for providing address change notification in an electronic message forwarding…*
- #7,004,396 *System and method for grouping mail pieces in a sorter* (Quine, Baker)
- #7,016,938 *E-mail forwarding system having archival database*
- #7,060,927 *Method and system for isolating and testing biological contaminants…* (Quine, Stemmle)
- #7,149,780 *Method for determining e-mail address format rules* (Quine, Schumacher)
- #7,156,290 *System and method for determining and reporting whether a mail piece has been opened by a recipient* (Stemmle, Hasbani, Auslander, Quine, Wittenberg, Nagarsheth)
- #7,191,222 *Method for providing address change notification in an electronic message forwarding …*
- #7,229,025 *Barcode with enhanced additional stored…* (Sussmeier, Auslander, MacKay, Obrea, Quine)
- #7,258,277 *Method for enhancing mail piece processing system* (Baker, Quine)
- #7,340,970 *Method and device for isolating, collecting & transferring hazardous samples* (Quine et al)
- #7,341,334 *System and method for preventing security ink tampering* (Auslander, Quine)
- #7,387,251 *Bar code recognition method and system for paper handling equipment* (Baker, Quine)
- #7,389,274 Integrated payment for international business reply mail (Sansone, Monsen, Quine)
- #7,414,219 *System and Method for Grouping Mail Pieces in a Sorter* (Quine, Baker)
- #7,491,548 *Method and device for collecting and transferring biohazard…* (Quine, Sharma, Massucci)
- #7,527,199 *Method and system for protecting privacy of signature on mail ballot …* (Quine, Ryan)
- #7,543,026 *System and Method for Address Correction Of Electronic Messages* (Quine, Schumacher)
- #7,558,831 *Method for providing address change notification in an electronic message forwarding …*
- #7,580,983 *E-Mail Forwarding System Having Archival Database*
- #7,596,600 *System for selective delivery of electronic communications* (Quine, Blue)
- #7,653,233 *Confirming cancellation of truncated checks* (Quine, Ryan)
- #7,690,566 *Integrated ballot and voting envelope with voter verification security* (Quine, Haas)
- #7,766,233 *Vote by mail envelope that protects privacy of voter's signatur*e (Haas, Quine, et al)
- #7,859,563 *System and method for synchronizing a strobe in video image capturing*
- #7,868,264 *System and process for reducing number of stops on delivery route*.. (Stemmle, Caddy, Quine)
- #7,889,885 *Method for detecting perforations on the edge of an image of a form* (Cordery, Campagna, Foth, Haas, Quine)
- #7,894,655 Confirming *cancellation of truncated checks* (Quine, Ryan)
- #7,922,208 *Method and system for protecting privacy of signatures on mail ballots* (Haas, Quine, Hammell, Campagna)
- #7,923,655 *Sorting method and system with dynamically re-allocated sortation bins* (Quine, Baker)
- #7,949,424 *Virtual code for delivery to the nearest building of organizations having multiple buildings*
- #7,972,869 *Method and device for collecting and transferring biohazard samples* (Quine, Sharma, Massucci, Summers)

- #8,022,329 *System and method for full escort mixed mail sorter using mail clamps* (Stemmle, Quine)
- #8,073,195 *Method and apparatus for detecting malfunctioning print elements in postage meter indicia printer* (Quine, Miller)
- #8,145,265 *Method and System for Producing Hard Copies of Electronic Information Employing a Portable Personal Receiving Device* (Pawlecki, Quine)
- #8,152,067 *Time Limited Business Reply Mail* (Quine)
- #8,152,068 *Systems and Methods for Producing and Processing Time Dependent Dynamic Barcodes in a Mail Delivery System* (Sanchez, Quine)
- #8,235,516 *Print enhancement of pixels to improve readability* (Auslander, Quine)
- #8,237,998 *Flexible system for feeding and processing multi-page documents* (Rozenfeld, Quine, et al)
- #8,287,004 *Reusable Windowed Envelope* (Rosen, Dahl, Quine, Reichelsheimer)
- #8,504,828 *Surface Profile Tracing of a Document* (Quine)
- # re43,118 *Method for determining e-mail address format rules* (Quine, Schumacher)

International Patents (11 separate patents; 4 foreign only)

- #EP1022693 (France, Germany, UK) "*Closed system meter having address correction capabilities"*
- #EP1434175 (France, Germany, Italy, UK) *Method for retrieving mailpiece tracking data using mailpiece image* [foreign only, not USA]
- #EP1439496 (France, Germany, Italy, UK) *System for tracking mailpieces* [foreign only, not USA]
- #EP1544493 (France, Germany, UK) *"Method and system for isolating and testing biological…"*
- #EP1605396 (France, Germany, UK) *Barcode with Additional Stored Data*
- #EP1671708 (France, Germany, UK) "*Method for enhancing mail piece processing system"*
- #EP1676646 (France, Germany, UK) *System and process for grouping mailpieces in a sorter*
- #EP1741496 (France, Germany, Liechtenstein, Switzerland, UK); #2551844 (Canada) "*Method and system for mitigating threats and hoaxes perpetrated through a mail system*" [foreign only, not USA]
- #EP1791081 (France, Germany, Liechtenstein, Switzerland, UK) "*Method for detecting perforation on the edge of an image of a form*" [foreign only, not USA]
- #EP1900646 (France, Germany, UK) *Method and System for protecting privacy of signature on mail ballot utilizing optical shutter*
- #EP2199087 (France, Germany, UK) *Print enhancement of pixels to improve readability*

Patent Citations

236 citations of my patents / patent applications by companies including: Abbott Point of Care, American Express Travel Related Services, AOL / America Online, AT&T / AT&T Delaware Intellectual Property / AT&T Intellectual Property, Bartex Research, BellSouth, Brandmail Solutions, Cameron Lanning Cormack, Canon Kabushiki Kaisha, Cingular, Cisco Technology, Dell Computer, Delphi Technologies, eBay, Engate Technology, Foundation IP, Fujitsu, Genworth Financial, Hand Held Products, Hewlett-Packard / Hewlett Packard Development, Hitachi, Honeywell International, Hoover's, IBM, Infowave Software, Infratab, I-Stat, Invention Science Fund, K&M International, Kabushiki Kaisha Toshiba, Kangnam-ku, Konica Minolta Systems Laboratory, Lashback, Leica Geosystems, Lockheed Martin, Lynch Marks, Matsushita Electric Works, McAfee, Message Level, MessageOne, Microsoft, Murata Kikai Kabushiki Kaisha, MX Logic Inc, NEC, Neopost, NMS Communications, Northrop Grumman, Nokia, Novell, NTT DoCoMo, Paksense, Panasonic, Pitney Bowes, QAS Limited, Research In Motion, Rightnow Technologies, Sendside Networks, SEVEN Networks, Siemens / Siemens AG/ Siemens Industry, Smart Caregiver, Sony Ericsson Mobile Communications AB, Sprint Spectrum, Stamps.com, Stanley Security, Teamon, TIP Communications, Toshiba, United Parcel Service, United Services Automobile Association - USAA, United States Postal

Service, University of Pittsburgh, Xerox, Xobni, Yangaroo, Zoltar Systems

Seminars and Lectures

Sept 2015	Boston University, Department of Philosophy, Boston, MA: guest speaker on "The Roots of Quine - *Mortui Vivos Docent*: *Learning from and Exploring the Quine Archives*" in Prof. Juliet Floyd's course *Philosophy 422/ 622* Analytic Philosophy: Quine,
Dec. 2014	*Quine and His Place in History* Conference at University of Glasgow, Scotland, "The Roots of Quine - *Mortui Vivos Docent*: *Learning from and Exploring the Quine Archives*"
Dec. 2014	*Quine and His Place in History* Conference at University of Glasgow, Scotland, presented rediscovered and edited version of Quine, WV. 1972. "Levels of Abstraction"
Dec. 2014	*Quine and His Place in History* Conference at University of Glasgow, Scotland, presented with Ann Lodge "Observations on the Contribution of W. V. Quine to Unified Science Theory"
June 2014	Mondays @ 7, Westport, Connecticut "Getting Hired: Lessons Learned Through Multiple Careers"
June 2014	American Philatelic Society, Bellefonte, Pennsylvania: (Summer Seminar General Session) "Exploring Modern Postal History: From Anthrax to ZIP Codes"
June 2014	FBI / Infragard Connecticut quarterly meeting, Bristol-Myers-Squibb, Wallingford, Connecticut "Hoax or Threat? Biohazards in the Mail"
June 2011	Princeton University, Department of Philosophy, Princeton, New Jersey: (National Endowment for the Humanities summer course on Quine and Davidson) "*Mortui Vivos Docent:* the Pleasure of Learning from Quine's Archives" [expanded version]
Oct. 2008	Harvard University, Cambridge, Massachusetts: (Quine at 100: A Centenary Conference) "*Mortui Vivos Docent:* Learning from and Exploring the Quine Archives"
Oct 2008	Pitney Bowes Open House, Canadian Museum of Civilization, Gatineau, Canada: "Mail Security Insights and Solutions"
June 2008	Oberlin College, Oberlin, Ohio: (W. V. Quine Historical Marker Dedication) "A Fitting Recognition for a Scholar and World Traveler" [brief remarks]
June 2008	Princeton University, Princeton, New Jersey: (W. V. Quine Centennial Symposium) "*Mortui Vivos Docent:* the Pleasure of Learning from Quine's Archives" [10 minutes]
Aug 2007	Americover 2007: American First Day Cover Society seminar, Stamford CT "Can you see the Mailstream?" (postal automation, personalized postage, and Pitney Bowes)
June 2007	American Philatelic Society Summer Seminar, Bellefonte, PA "Where is the Mailstream? (postal automation, personalized postage, and Pitney Bowes)"
Mar 2007	COM 310: Business and Professional Speaking, Western Connecticut State Univ., Danbury, CT "Presentation Techniques for Business and Executive Audiences"
Oct 2006	Ottawa, Canada "Security and Risk Management Solutions for the Mailstream"
Oct 2006	Connecticut Quality Improvement Award Partnership, Westbrook, CT "Secure Mail and the Pitney Bowes Innovation Pipeline to BISS" (top gold Innovation Prize)
Mar 2006	European Corporate Security Conference, Brussels, Belgium "Mail Security Insights and Solutions Developed Through Pitney Bowes Research"
Sept 2005	Pitney Bowes Advanced Concepts & Technology, Shelton, CT "AC&T Research and Development Support for Secure Mail"
Mar 2004	Connecticut Business & Industry Association, Manchester Community College, Manchester CT

"Anthrax in the Mail: A Case Study in Technology Integration for Homeland Security"

Nov 2003 Connecticut Technology Council conference on National Security and Biotechnology Spotlight, Yale University, New Haven CT "Anthrax in the Mail: A Case Study in Technology Integration for Homeland Security"

Apr 2002 Pitney Bowes Advanced Concepts & Technology, Shelton, CT "Solving Messaging Problems with a Scientific Approach"

Jan 2002 USPS Conference on Direct Mail in Challenging Times. Stamford CT "Combining Electronic and Hard Copy Media to Improve Customer Communications"

May 2001 Pitney Bowes Customer Conference, Marcos Island FL "Combining Electronic and Hard Copy Media to Improve Customer Communications"

June 2000 Advanced Metering, Billing and Customer Relationship Management Conference, Institute for International Research, Atlanta GA "How to Excel in e-Commerce."

May 2000 Mailcom, Atlantic City, NJ "Electronic Bill Presentment and Payment – Panel Discussion."

May 2000 National PCC Day, United States Postal Service, GMF, Edison, NJ "How to Excel in e-Commerce."

Mar 1987 Ornithology (guest lecture), Ecology, Ethology, & Evolution, University of Illinois "Sensory basis of bird navigation."

Mar 1987 Ecology, Ethology, & Evolution, University of Illinois "The infrasound sense of homing pigeons."

Feb 1987 Biology 123, University of Illinois "Magnetic and visual senses in animals." (also Oct 1986)

Sep 1986 Wildlife and Fisheries Seminar, University of Illinois, "Sensory world of animals."

Mar 1986 Champaign-Urbana Humane Society, Urbana IL, "Mystery of bird navigation."

Mar 1986 Life Sciences Open House, University of Illinois "Observations of birds on Doppler weather radar."

Jul 1985 Minisymposium on Avian Navigation, Neurobiology & Behavior, Cornell University "Studies of birds migration using Doppler weather radar."

May 1985 Bird-Aircraft Strike Hazard Conference, Vandenberg AFB, CA "NEXRAD's potential for warning of bird hazards."

Apr 1985 Ecology, Ethology, and Evolution Seminar University of Illinois "Sensory basis of bird navigation."

Mar 1985 Meteorology Seminar, Massachusetts Institute of Technology "Radar studies of bird migration."

Mar 1985 Ornithology (guest lecture), Ecology, Ethology, & Evolution, University of Illinois "Sensory basis of bird navigation."

Feb 1985 Remote Sensing, National Center Atmospheric Research, Boulder, CO. "Radar studies of bird migration."

Nov 1984 Research Seminar, Air Force Geophysical Laboratory, Sudbury, MA "Bird migration on Doppler and Tracking Radars."

Nov 1984 Research Seminar, Air Force Geophysical Laboratory, Sudbury, MA "Bird navigation systems."

Nov 1984 Research Seminar, Air Force Geophysical Laboratory, Sudbury, MA "Studies of bird migration using radar."

Dec 1983 Biomedical Engineering Seminar, Tulane University "Many octaves below human hearing: Pigeons hear and discriminate infrasound - Where could it get them?"

Jun 1983 Animal Behavior Society Meeting, Bucknell University "Olfactory navigation of pigeons

(*Columba livia*): Effects of odorous air currents in America and Italy."

Apr 1983 Applied Psychology Seminar, University of New Orleans "Psychophysical studies of hearing changes in Multiple Sclerosis."

Feb 1983 Introductory Psychology, Honors (guest lecture), Tulane University "Sensory systems and bird navigation."

Jan 1983 Physiology Seminar, Tulane Medical School "Pigeons hear 8 octaves below the range of human hearing: Could it help them home?"

Dec 1982 Pharmacology Seminar Tulane Medical School "Alpha-pinene and the 59th Street Bridge Song: Is infrasound navigation for the birds?"

Nov 1982 Psychology Colloquium, Tulane University "Pigeons hear 8 octaves below the range of human hearing: Could it help them home?"

Jun 1982 Multiple Sclerosis Society, Halifax, Nova Scotia "Hearing changes in Multiple Sclerosis."

Feb 1982 British Broadcasting Corporation (BBC): Animal Language – Sound Communication in Animals

Nov 1981 Department of Medicine Research Seminar, Dalhousie University "Hearing changes in Multiple Sclerosis."

Sep 1981 International Symposium on Avian Navigation, Tirrenia, Italy "Pigeons detect infrasound: Could it guide them home?"

Sep 1981 XVIIth International Ethological Conference, Oxford U, England "Fluctuations in outdoor sound propagation: Implications for animal communication."

May 1981 Acoustical Society of America meeting, Ottawa, Ontario "Fluctuations in outdoor sound propagation: Implications for animal vocalizations."

May 1981 Acoustical Society of America meeting, Ottawa, Ontario "Specific loss of sensitivity to frequency modulation in Multiple Sclerosis (MS)."

May 1981 Acoustical Society of America meeting, Ottawa, Ontario "Delayed auditory perception and delayed BEP's in Multiple Sclerosis patients."

May 1981 Multiple Sclerosis Society of Canada, Atlantic Division, 7th Annual Conference, Keynote Address, Moncton, New Brunswick "Hearing research and Multiple Sclerosis."

Apr 1981 HMCS Okanagan, CFB Halifax "Two simple circuits for the conversion of low frequency sounds to audible sounds."

Mar 1981 School of Human Communication Disorders, Dalhousie University "The unusual hearing abilities of animals: Sounds we don't hear."

Mar 1981 School of Human Communication Disorders, Dalhousie University "Hearing research in Multiple Sclerosis: Methods and progress."

Apr 1980 Psychology Department Convention, Dalhousie University "Groaning mountains and grunting storms: The challenge of outdoor research."

Apr 1980 Orientation and Migration Conference, The Rockefeller University "Infrasound frequency discrimination by the homing pigeon."

May 1979 Thesis Seminar, Neurobiology and Behavior, Cornell University "Homing pigeons hear infrasounds: Where does it get them?"

Dec 1978 Psychology Department Seminar, Dalhousie University "Long distance navigation by birds using infrasound."

Nov 1978 Animal Communication course (guest lecturer), Cornell University "Sound propagation and animal communication."

Jul 1978 American Pigeon Fanciers' Council Annual Meeting, St. Louis, MO "Pigeons detect infrasound: Does it guide them home?"

May 1978 Acoustical Society of America, Providence, Rhode Island "Infrasound detection and ultralow frequency discrimination in the homing pigeon."

Nov 1977 Animal Communication course (guest lecturer), Cornell University "Sound propagation and animal communication."

Sep 1977 Neurobiology and Behavior Seminar Series, Cornell University "Frequency discrimination by the barn owl."

Mar 1976 Freshman Research Seminar Series, Cornell University "Barn owl frequency discrimination."

Mar 1974 Field Research Center for Ecology and Ethology, The Rockefeller University "Sound propagation: Theory and field studies."

May 1973 Biology Senior Symposium, Princeton University "Barn owl frequency discrimination."

Reports

Feb 1985 Larkin RP, Quine DB. Interim report: Summary of waterfowl migration data gathered at AFGL. USAF Contract F08637-84-COO62, AFESC. 4 p.

Jun 1985 Larkin RP, Quine DB. Interim report on progress of full recognition algorithm. USAF Contract F08637-84-CO062, AFESC. 10 p.

Apr 1986 Quine DB, Larkin RP. Final report for waterfowl recognition algorithm. USAF Contract F08637-84-COO62, AFESC. 33 p.

Jun 1987 Larkin RP, Quine DB. Draft report on bird movement data. CERL Contract DACA88- 86-D0001, AFESC. 49 p.

Dec 1987 Quine DB, Larkin RP. Draft report on bird movement data and NEXRAD system. USFWS Contract 14-16-0009-87-1221, AFESC. 13 p.

Popular Publications

1980 Quine DB, Chrisler TS. "Can pigeons 'hear' their way home?" *American Pigeon Racing News (May)*: 17-20

1980 Chrisler TS, Quine DB. "Can pigeons 'hear' their way home?" *A. F. A. Watchbird VII (June/ July)*: 14-18 (reprint of *American Pigeon Racing News* with color photographs)

1980 Chrisler TS, Quine DB. "Can pigeons 'hear' their way home?" *American Pigeon Journal (August)*: 17&19 (reprint of *American Pigeon Racing News*)

Digital Document Delivery White Papers

2001 Quine D. "Improving the Effectiveness of Email Messaging." (Pitney Bowes)

2000 Gardner D & Quine D. "Digital Document Delivery: Improving the Speed and Accuracy of Bill Payment, Statement Presentation and Employee Communications." (Pitney Bowes)

Poster sessions

Jun 1986 XIX Congressus Internationalis ornithologicus, Ottawa, Canada "Birds migrating in 'windrows' at night over Kansas."

Jun 1984 Greater New Orleans Society for Neuroscience, Techniques Mini Symposium "Computer analysis of vestibular responses to putative neurotransmitters."

Feb 1984 Association for Research in Otolaryngology, St. Petersburg, FL "Computer analysis of vestibular

responses to putative neurotransmitters."

Dec 1981 Research Symposium, Dalhousie University "Specific loss of sensitivity to frequency modulation in Multiple Sclerosis (MS)."

Jan 1981 American Association for the Advancement of Science, Toronto, Ontario "Many octaves below human hearing: Pigeons detect and discriminate infrasounds."

Apr 1980 Psychology Department Convention, Dalhousie University "Eight octaves below human hearing: Pigeons detect infrasounds."

Jun 1979 Acoustic Society of America, Cambridge, Massachusetts "Ultralow frequency discrimination: Can homing pigeons localize infrasounds by Doppler shifts?"

Sep 1977 Section of Neurobiology and Behavior Convention, Cornell University "Infrasound, Pigeons, Navigation."

Philatelic Software

Quine DB. 1991. "POSTNET Decoding Software for IBM & Macintosh Computers." (c) 1991 Triskelion Ltd, Chantilly, VA

Quine DB. 1994. "POSTNET Decoding Software for Macintosh Computers." released on Arizona Mac Users Group *BBS In A Box CD-ROM Volume X*, January 1994

Certifications

1970 Radio Telephone Third Class Operator Permit

1972 Registered Emergency Medical Technician – Ambulance

1972 Basic First Aid Teacher, American Red Cross

1976-1980 Bonded Locksmith

World Wide Web Page examples (over 2,500,000 visitors)

www.wvquine.org	Willard Van Orman Quine - philosophy
www.postal-markings.org	Auxiliary Markings Club web site
www.triskelion-ltd.com/postnetj.html	POSTNET decoder JavaScript on-line
www.triskelion-ltd.com/uspsglos.html	USPS Acronym List
www.triskelion-ltd.com/lps.html	Beatles albums
www.quine.org	Douglas Boynton Quine

Reviews Of Quine's Software and Web Sites

Hines T. 1991a. "Software." *The Philatelic Communicator: 24*: 65-66 [Review of POSTNET decoder]

Hines T. 1991b. "POSTNET Decoder: A Software Review." *Postal Mechanization Study Circle Newsletter 15*: 116

Hines T. 1991c. "Software Review: POSTNET Decoder." *Modern Postal History Journal 10*: 7

Rapaport WJ. 1997. "Review of Willard van Orman Quine http://users.aol.com/drquine/wv-quine.html." *American Philosophical Association Newsletter on Philosophy and Computers 97: 1 (Fall '97)*

Offices Held

2015-present Advisor, Research Center on Quine, University of Glasgow

2015Q1 President and Executive Board, The Westport Group

2014Q3 Secretary and Executive Board, The Westport Group

2014 Vice-President and Board of Directors, (FBI) Infragard Connecticut

2003-present Webmaster and Co-founder, Auxiliary Markings Club (honorary life member 2017)
1997-2000 Postal Automation Task Force, National Postal Museum, Smithsonian Institution
1989-present Chairman, Modern Postal History Committee, BIA/USSS
1988-1994 Board of Governors, Bureau Issues Association/ U.S. Stamp Society
1988 Executive Board, Champaign-Urbana Stamp Club, Champaign IL
1986-1988 Codirector, NEXRAD Algorithm development for Bird Hazards, USFWS / CERL
1986-1987 President, Champaign-Urbana Stamp Club, Champaign IL
1983-present President & Board of Directors, Triskelion Ltd.
1982-1984 Technical Advisor, Commodore Pet Computer Group, New Orleans LA
1971-1972 Board of Directors, Ivy Radio Network, New Haven, CT
1971-1972 Senior Board, Princeton Broadcasting Corp, Princeton NJ

Committees

2005-2010 Pandemic Flu Advisory Committee, Pitney Bowes
2000-2001 Futures Strategy Group, Postal Technology, Pitney Bowes
1995-1996 Compensation Advisory Committee, Pitney Bowes Production Mail
1992-1993 Command Media Review Board, Martin Marietta Postal Systems
1991 Technology Steering Committee, Martin Marietta Information Systems
1985 Committee on Future Directions - Wildlife Illinois Natural History Survey
1984 Doctoral Dissertation Committee - E. Rafferty, Tulane University, Psychology
1983 Senior Thesis Committee - R. Pielet, Tulane University, Psychology
1977-1978 Committee on Transportation, Cornell University

Judge / Reviewer

2010-2011; 2014 Judge, Connecticut Quality Improvement Award Partnership (Innovation Prize)
2009-2012 Judge, Southern Connecticut Invitational Science & Engineering Fair
1988 Philatelic Judge, Illinois State Fair, Springfield, IL
1981-2018 Reviewer: *Science (1981, 1982);* National Science Foundation (1982); National Science & Engineering Research Council Canada (1983); *Quarterly Review of Biology (1985); The Auk (1986);* University of Illinois Research Board (1987); *Animal Behaviour* (1988); *Journal of the American Medical Informatics Association – JAMIA* (2018); *Acta Acustica* (2018)

Awards and Honors

2019 *Who's Who Albert Nelson Marquis Lifetime Achievement Award* for Professional and Public Service
2019 *Who's Who* online
2007 "Pitney Bowes Prism" award for leveraging diversity
2006 "Pitney Bowes One" (highest corporate award) award for European Secure Mail Facility
2006 "Top gold Innovation Prize", Connecticut Quality Improvement Award Partnership
2000 Britannica.com "Internet Guide Award" for wv-quine.html. "one of the best on the Internet"
1992 Martin Marietta Postal Systems Supplementary Incentive Compensation (SIC) award
1990 Martin Marietta SIC award for DBCS field test and also SIC award for DBCS Proposal
1989 *Who's Who In Emerging Leaders*, 2nd Edition (1989-1990)
1988 *Who's Who In The Midwest*, 21st Edition (1988-1989)
1988 Collector's Club of Chicago Award: Best Research of Post WWII; American Philatelic Society Research Medal; American Association of Philatelic Exhibitors Gold Pin; Milcopex Vermeil Medal
1984 Association for Research in Otolaryngology (elected member)
1983 Sigma Xi - Science Research Society (elected full member)
1980 New York Academy of Sciences (elected member)

1978 Schuyler Gage Fellow in Animal Biology (Cornell University)
1978 Phi Kappa Phi honorary fraternity (elected member)
1977 War on Waste Award, Cornell University
1976 Outstanding Instructor (Neurobiology & Behavior, Cornell University)
1973 Cannon Thesis Prize in Biology (Princeton University)
1969 Certificate of Merit, National Merit Scholarship Program
1961 Group Project Grand Prize, Park School Science Fair

Society Memberships / Volunteer

American Philatelic Society (member, speaker, course instructor)
Auxiliary Markings Club (co-founder, webmaster, lifetime member)
Disinfected Mail Study Circle
Habitat for Humanity (construction volunteer July 2007, January 2008)
Meter Stamp Society
Mourning Stamps and Cover Club
New York Academy of Sciences (lifetime member)
Postal Mechanisation Study Circle
Sigma Xi (scientific honor society)
United States Stamp Society / Bureau Issues Association (former board member)
The Westport Group (former officer)

Continuing Professional Education

1971 August	Emergency Medical Technician Advanced Training, Washington DC
1989 June	Lighting and Optics, Society of Manufacturing Engineers (3 days), Nashville TN
1993 October	Customer Driven Quality (C-DQ), Pitney Bowes
1993 November	Kaizen, Pitney Bowes
1994 June	Continuous Improvement Program, Pitney Bowes
1994 September	Disaster Recovery, Atlanta
1995 June	Group Leadership, Pitney Bowes
1996 November	Project Management for Success, Learning Tree
1997 March	Time Management, Pitney Bowes
1997 April	Assessing Competencies for Tomorrow, Pitney Bowes
1997 April	Gender Diversity, Pitney Bowes
1997 June	Conflict Management, Pitney Bowes
1998 January	Negotiation, Gibson Associates
1998 April-Dec.	Business Leadership Development Program, Pitney Bowes / Babson College
1999 January	Leveraging Diversity Competencies to Advance Team Goals, Pitney Bowes
1999 May	Managing to Avoid Litigation, Pitney Bowes
1999 May	How To Deliver Exceptional Customer Service, Pryor Seminars
1999 September	How to Organize and Maintain Files and Records, Pryor
1999 December	Business Writing for Results, Pryor
2000 December	Leading People, Pitney Bowes
2000 December	Future Strategy Forum, Prudential Center for Learning and Innovation
2002 February	Leading Change; Leading the Business, Pitney Bowes
2005 November	Building Vulnerability and Protection Against Chemical & Biological Threats, UNC
2006 March	LEADing Leaders, American Management Association
2006 April	Pitney Bowes Data Privacy and Information Security training
2006 June	Baldrige quality examiner training, Connecticut Quality Improvement Award

2008 May	Voice of Leadership, American Management Association
2011 May	Bird Friendly Buildings: Design and Retrofit, American Bird Conservancy
2011 September	Improvised Explosive Device Counterterrorism Workshop, Dept. Homeland Security
2012 June	InfinityQS SPC Fundamentals Training (4 days)
2014 September	Joint FBI / CDC Criminal and Epidemiological Investigations Workshop (2 days)
2015-2017	Bridgeport Hospital: 14 courses in safety, laboratory practices, HIPAA, ethics, IT
2017-present	Veterans Affairs Connecticut Healthcare: ~ 30 annual courses in safety, HIPAA, ethics, IT, human subjects research
2017-present	Veterans Affairs Connecticut Healthcare: weekly local research seminars or cyberseminars during academic year