

VITA
CHARLES R. LINK
Professor of Economics
Bank of America Professor of Business & Professor of Economics

I. Biographical Information

Current Address: 275 Orchard Road
Newark, Delaware 19711
(443) 466-3249
email: clink@udel.edu

Education:

University of Missouri (Columbia), B.A., 1966, Economics
University of Wisconsin (Madison), M.A., 1968, Economics
University of Wisconsin (Madison), Ph.D., 1971, Economics

Fields of Specialization:

Labor and health economics (emphasis is on financing health care)
Economics of Education (emphasis is on financing education)
Economics of Professional Baseball (baseball finances and labor markets)
Health Economics and Health Labor Markets

Honors:

- See grants listed below in section II
- Woodrow Wilson Designate (1966-1970) - Research
- Omicron Delta Epsilon
- Fellow in the Center for Advanced Study (University of Delaware) - Research
1985-86 (one of 4 UD Full Professors selected from a panel of distinguished full professors at the UD)
- Salzburg Seminar (January/February 1990)
- Selected to participate in the American Economic Association Seminar on Excellence in Teaching Economics, 1994
- Fellow in the Center for Advanced Study (University of Delaware) - Teaching
1996-97 (only UD Full Professor to receive a teaching fellowship as selected by a panel of distinguished Full Professors at the UD. Only UD Full Professor to have received both a research and teaching award.)
- Department of Economics Excellence in Teaching Award, 1995
- University of Delaware Excellence in Teaching Award, 2000
- Named professor at the UD 2002-present: Bank of America Professor of Business
- 2014 Outstanding Teacher Award for the Alfred Lerner College of Business and Economics.

Association Memberships:

American Economic Association
International Health Economics Association
American Society of Health Economists
Western Economic Association

Employment History:

July 2002 - MBNA America Professor of Business (name changed to Bank of America Professor of Business)
September 1981 - Professor of Economics, University of Delaware
September 1975 to September 1981 - Associate Professor of Economics, UD
January 1971 to September 1975 - Assistant Professor of Economics, University of Delaware
September 1970 to January 1971 - Instructor of Economics, University of Delaware

II. Research**A. Articles Published in Refereed Journals**

1. Charles R. Link, "The Quantity and Quality of Education and Their Influence on Earnings: The Case of Chemical Engineers," Review of Economics and Statistics, May 1973, pp. 241-47.
2. Charles R. Link and Edward C. Ratledge, "Social Returns to Quantity and Quality of Education: A Further Statement," Journal of Human Resources, (Winter) 1975, pp. 78-89.
3. Charles R. Link and Edward C. Ratledge, "The Impact of the Quantity and Quality of Education on Black/White Earnings Differentials: Some New Evidence," Review of Economics and Statistics, August 1975, pp. 346-50.
4. Charles R. Link, "Black Education, Earnings, and Interregional Migration: Some New Evidence," The American Economic Review, March 1975, pp. 36-39.
5. Charles R. Link and John H. Landon, "Monopsony and Union Power in the Market for Nurses," Southern Economic Journal, April 1975, pp. 649-59.
6. Charles R. Link, "Graduate Education, School Quality, Experience, Student Ability and Earnings," Journal of Business of the University of Chicago, October 1975, pp. 470-91.
7. Charles R. Link and Edward C. Ratledge, "Factors Affecting Student Achievement: A Simultaneous Equations Model With IQ," 1975 Proceedings of the American Statistical Association.
8. Charles R. Link and John H. Landon, "Market Structure, Nonpecuniary Factors and Professional Salaries: Registered Nurses," Journal of Economics and Business, Vol. 28, 1975-76, pp. 151-56.
9. Charles R. Link, Edward C. Ratledge and Kenneth A. Lewis, "Black/White Differences in Returns to Schooling: Some New Evidence," American Economic Review, March 1976.

10. Charles R. Link and Edward C. Ratledge, "Proxies for Observations on Individuals Sampled from a Population: Reply," Journal of Human Resources, (Summer) 1976.
11. Charles R. Link and Edward C. Ratledge, "Useful Interactions in Econometric Models: The Case of Black/White Earnings Differentials," Applied Economics, 1977, 9, pp. 83-91.
12. James R. Thornton, Richard Agnello, and Charles R. Link "Poverty and Economic Growth: The Trickle Down Peters Out," Economic Inquiry, July 1978, pp. 385-94.
13. Charles R. Link and Edward Ratledge, "Student Perceptions, IQ, and Achievement," Journal of Human Resources, (Winter) 1979, pp. 98-111.
14. Charles R. Link and Russell F. Settle, "Labor Supply Responses of Married Professional Nurses: New Evidence," Journal of Human Resources, Spring 1979, pp. 256-266.
15. David Black, Kenneth Lewis and Charles R. Link, "Wealth Neutrality and the Demand for Education," National Tax Journal, June 1979, pp. 157-65.
16. Charles R. Link and Russell F. Settle, "Labor Market Competition and Nurse Earnings: An Economic Analysis," Research in Nursing and Health, December 1979, pp. 141-51.
17. James R. Thornton, Richard Agnello and Charles R. Link, "Poverty and Economic Growth: Trickle Down Has Petered Out," Economic Inquiry, January 1980.
18. Charles R. Link, Edward C. Ratledge and Kenneth Lewis, "The Quality of Education and Cohort Variation in Black/White Earnings Differentials: Reply," American Economic Review, March 1980.
19. David E. Black, Kenneth A. Lewis and Charles R. Link, "Wealth Neutrality and the Demand for Education," National Tax Journal, June 1980.
20. Charles R. Link and Russell F. Settle, "Financial Incentive and Labor Supply of Married Professional Nurses: An Economic Analysis," Nursing Research, July-August 1980.
21. Charles R. Link, Stephen H. Long, and Russell F. Settle, "Cost-Sharing, Supplementary Insurance, and Health Services Utilization Among the Medicare Elderly," Health Care Financing Review, (Fall) 1980.
22. Charles R. Link, Kenneth A. Lewis and David E. Black, "New Evidence on the Achievement of Wealth Neutrality in School Finance," Journal of Human Resources, Spring 1981.

23. Charles R. Link and Russell F. Settle, "Wage Incentives and Married Professional Nurses: A Case of Backward Bending Supply," Economic Inquiry, January 1981.
24. Charles R. Link and Russell F. Settle, "A Simultaneous Equation Model of Labor Supply, Fertility and Earnings of Married Women: The Case of Registered Nurses," Southern Economic Journal, April 1981.
25. Charles R. Link, Stephen H. Long and Russell F. Settle, "Access to Medical Care Under Medicaid: Differentials by Race," Journal of Health Politics, Policy and Law, Vol. 7, No. 2, Summer 1982, pp. 345-365.
26. Charles R. Link, Stephen H. Long and Russell F. Settle, "Equity and the Utilization of Health Care Services by the Medicare Elderly," Journal of Human Resources, Vol. 17, No. 2, Spring 1982, pp. 195-212.
27. Stephen H. Long, Russell F. Settle, and Charles R. Link, "Who Bears the Burden of Medicare Cost Sharing?" Inquiry, Vol.19, (Fall) 1982, pp. 222-234.
28. Saul D. Hoffman and Charles R. Link, "Selectivity Bias in Male Wage Equations: Black-White Comparisons," Review of Economics and Statistics, May 1984.
29. Charles R. Link and Russell F. Settle, "Labor Supply Responses of Licensed Practical Nurses: A Partial Solution to a Nurse Shortage," Journal of Business, Vol. 37, 1986, pp. 1-9.
30. Charles R. Link and James Mulligan, "The Merits of a Longer School Day," Economics of Education Review, Vol. 5, No. 4, pp. 373-383 (1986).
31. Charles R. Link, "What Does a B.S. Degree Buy? An Economist's View," American Journal of Nursing, Vol. 87, No. 12, 1987, pp. 1121-1131.
32. Charles R. Link, "Returns to Nursing Education, 1970-1984," Journal of Human Resources, Vol. 23, No. 3, Summer 1988, pp. 372-387.
33. With J. Mulligan, "Classmates' Effects on Black Student Achievement in Public School Classrooms," Economics of Education Review, 1991, pp. 297-311.
34. "Labor Supply Behavior of Registered Nurses: Female Labor Supply in the Future?" Research in Labor Economics, JAI Press, 1992.
35. With J. Mulligan, "Standardized Test Scores and School Accountability, in Assessing Educational Practices, ed. W. Baumol and W. Becker, 1996, MIT Press.
36. With Tevik Aksoy, "A Panel Analysis of Student Mathematics Achievement in the U.S. in the 1990s: Does Increasing the Amount of Time in Learning Activities Affect Math Achievement?" Economics of Education Review, July, 2000.

37. With Yvana Chiha, "The Shortage of Registered Nurses and Some New Estimates of the Effects of Wages on RN Labor Supply: A Look at the Past and a Preview of the 21st Century," Health Policy, vol. 64, 2003, pp. 349-375.
38. With Simon Condliffe, "The Relationship between Economic Status and Child Health: Evidence from the U.S." 39. With Simon Condliffe, "The Relationship between Economic Status and Child Health: Evidence from the U.S.", American Economic Review, vol. 98, 2008 pp. 1605-1618.
39. With Daniel Brown, "Population and Bandwagon Effects on Local Team Revenues in Major League Baseball," Journal of Sports Economics, Vol. 9, 2008, number 5, pp. 470-487.
40. With Simon Condliffe and Bryan Townsend, "Who Receives Statins? Variations in Physician Prescribing Patterns for Patients with Coronary Heart Disease"; Applied Economics Letters, 2010, Vol. 17, number 17, pp. 1647 – 1652.
41. With Martin Yosifov, "Contract Length and Salaries: Compensating Wage Differentials," Journal of Sports Economics. February 2012, Vol. 13, number 1, pp. 3-19.
42. With Marco DiBonaventura, Michael Pollack, Jan-Samuel Wagner, and Setarah Williams) "The Relationship Between Patient-Reported Tolerability Issues With Oral Antidiabetic Agents and Work Productivity Among Patients Having Type 2 diabetes," in Journal of Occupational and Environmental Medicine. February 2011, Vol. 53, number 2, pp. 204-210.
43. With Dan Brown and Mike Staten, "The Success and Failure of Counseling Agency Debt Repayment Plans," Eastern Economic Journal. January 2012, pp. 99-117.
44. With Simon Condliffe, Michael Pollack, and Shreekanth Parasuraman "The Effects of Hypertension and Obesity on Total Health Care Expenditures of Diabetes Patients in the United States, Applied Economic Letters, 2013, 649-652.
45. With Simon Condliffe "Racial Differences in the Effects of Hypertension and Obesity on Health Expenditures by Diabetes Patients in the US," Applied Economic Letters, 2013, (21:4) 280-283.
46. With Bogdan Nedanov, "Cumulative Effects of Initial Occupational Choice on Adult Obesity," Eastern Economic Journal, 41, 2015, pp. 430-442.
47. With Dan Brown and Seth Rubin (an undergraduate student) "Moneyball After 10 Years: How Have Major League Baseball Salaries Adjusted?" Journal of Sports Economics, 18 no. 8, December 2017.

48. With Simon Condliffe (2015): "Registered Nurses: the Impact of Wages on Labour Force Participation and Hours Worked – Are Wages an Effective Mechanism for Addressing RN Shortages with Evidence from 1960 to 2008?" Applied Economics Letters, DOI: 10.1080/13504851.2015.1114570
To link to this article: <http://dx.doi.org/10.1080/13504851.2015.1114570>
Published online: 20, November 2015.
49. With Simon Condliffe. "The Rise of Diabetes and Comorbidities: Prevalence and Disparities in Expenditures," in R. Rycroft (Ed.), The American Middle Class: An Economic Encyclopedia of Progress and Poverty. ABC-CLIO, Inc., June 2017.
50. With Alex Gross (an undergraduate student) "Does Option Theory Hold for Major League Baseball Contracts?" Economic Inquiry, 55 no. 1. January 2017, 425-433.
51. With David Hunt, "Better Outcomes at Lower Costs? The Effect of Public Health Expenditures on Hospital Efficiency," Applied Economics, vol. 52, issue 4, 2020, pp. 400-415.
52. With Simon Condliffe and Sezin Zengin, "Factors Affecting the Labor Supply Decisions of Registered Nurses," Contemporary Economic Policy, vol. 38 no. 1, Jan. 2020, pp. 400-415.
53. With Shengnan Dai, "Did High-Speed Rail Induce Regional Convergence in China," Economic Analysis and Policy, Volume 86, June 2025, Pages 2222-2232

B. Published Monographs

1. *An Evaluation of the Delaware State Public Elementary and Secondary Educational Equalization Laws*. 1983 Charles R. Link, Kenneth A. Lewis, David E. Black and Edward C. Ratledge. Prepared for the Department of Public Instruction of the State of Delaware. {This is available from the Educational Resources Information Center (ERIC).}
2. *Causes of Litigation in Workers Compensation Programs*, 1995 W.E. Upjohn Institute for Public Employment Research. With E. Falaris and M. Staten

D. Research in Progress

1. "The Effect of State Medicaid Programs on the Dental Expenditures of Low Income Individuals in the U.S.
2. "The Effect of Obesity on the Labor Market Outcomes of Chinese Workers" with Simon Condliffe.
3. "Final Offer Arbitration in Major League Baseball. Why Owners Hate it: A Panel Analysis based on Data From 1984 - 2018" With Alex Gross.

4. An Analysis of the Structure of the Salaries in Major League Baseball: Is the Salary Determination Process the Same for Free Agents and Arbitration Eligible Players?" with Alex Gross.

E. Grants Received

1. Title: "Black-White and Male-Female Earnings Differentials."
Date: Summer 1973
Amount: \$2,000
Granting Agency: University of Delaware (Faculty Research Grant)
Role: Sole Investigator
2. Title: "Monopsony and Unionism: The Case of Registered Nurses," and "Black-White and Male-Female Earnings Differences."
Date: January 1974 - September 1975
Amount: \$25,000.
Granting Agency: UNIDEL
Role: Principal Investigator
3. Title: "An Economic Analysis of School District Restructuring."
Date: February 1974 - August 1974
Amount: \$10,000
Granting Agency: University of Delaware Research Foundation
Role: Principal Investigator
4. Title: "Determinants of Nurse Labor Supply: An Economic Analysis."
Date: October 1975 - June 1976
Amount: \$2,950
Granting Agency: Delaware Institute for Medical Education and Research
Role: Sole Investigator
5. Title: "An Evaluation of the Delaware State Public Elementary and Secondary Education Equalization Laws."
Date: July 1976 - September 30, 1978
Amount: \$110,000
Granting Agency: U.S. Office of Education
Role: Principal Investigator
6. Title: "The Supply of Professional Nurses."
Date: September 1976 - August 31, 1977
Amount: \$25,000
Granting Agency: U.S. Department of Labor
Role: Principal Investigator
7. Title: "Economic Impacts of a Particular Public Service Employment Program."
Date: Summer 1976
Amount: \$3,000
Granting Agency: U.S. Department of Labor, Assistant Secretary
Role: Sole Investigator

8. Title: "The Supply of Professional and Non-professional Nurses."
Date: February, 1977 - September 30, 1980
Amount: \$143,000
Granting Agency: Division of Nursing, U.S. Department of Health, Education and Welfare
Role: Principal Investigator
9. Title: "Access, Utilization, and Distributive Effects of Medicaid and Medicare."
Date: September 1978 - September 30, 1981
Amount: \$656,470
Granting Agency: Health Care Financing Agency, Department of Health and Human Services
Role: Investigator
10. Title: "An Evaluation of Equity Under the Medicare Program."
Date: July 1981 - August 31, 1982
Amount: \$293,819
Granting Agency: Health Care Financing Agency, U.S. Department of Health and Human Services
Role: Investigator
11. Title: "Impacts of Medicaid and BCHS Projects on Access to Care."
Date: September 1981 - August 1982
Amount: \$34,999
Granting Agency: National Center For Health Services Research
Role: Investigator
12. Title: "Factors Impacting Hospital Nurse Vacancies."
Date: January 1, 1984 - January 31, 1985
Amount: \$20,000
Granting Agency: The Robert Wood Johnson Foundation
Role: Principal Investigator
13. Title: "The Cost of Continuances."
Date: January 1985 - January 1987
Amount: \$5,000
Granting Agency: National Institute of Justice
Role: Investigator
14. Title: "The Labor Market for RNs and LPNs."
Date: September 1985 - August 1986
Amount: \$51,000
Granting Agency: Center for Advanced Studies: University of Delaware
Role: Sole Investigator

15. Title: "The Study of Workman's Compensation in Delaware."
Date: January 1987 - September 1987
Amount: \$16,200
Granting Agency: State Development Office
Role: Co-Principal Investigator
16. Title: "Assessment to Sales Price Study for Delaware's Public School Districts."
Date: August 1988 - June 1989
Amount: \$48,461
Role: Co-Principal Investigator
17. Title: "Labor Supply of Registered Nurses."
Date: June 1, 1991 - August 31, 1991
Amount: \$5,000
Granting Agency: General University Research Grant - University of Delaware
Role: Sole Investigator
18. Title: "An Analysis of Litigation in Worker's Compensation."
Date: January 1, 1990 - December 31, 1992
Amount: \$45,100
Granting Agency: UpJohn Institute for Employment Research
Role: Principal Investigator
19. Title: "Multimedia and Principles of Microeconomics"
Date: June 1, 1994 - May 30, 1995
Amount: \$1,000
Granting Agency: Center for Teaching Effectiveness
Role: Sole Investigator
20. Title: Multimedia and Teaching Economics
Date: September 1996 - August 1997
Amount: \$95,000
Granting Agency: Center for Advanced Studies: University of Delaware
Role: Sole Investigator
21. Title: Quality of Care Issues in the Uptake and Use of New Pharmaceutical Treatments in the United States and the United Kingdom.
Date: July 1, 2002 – June 30, 2003
Amount: \$8,000
Granting Agency: Center for International Studies at the UD

F. Presentations at International, National or Regional Professional Meetings

1. "Graduate Education, School Quality, Student Ability, Experience, and Earnings" (Atlantic Economic Conference, September 1973).
2. "Market Concentration and Nurses' Salaries" (Western Economic Association Annual Meetings, June 1974).

3. "Education and Black and White Earnings Differentials" (Western Economic Association Annual Meetings, Las Vegas, June 1974), [with Edward C. Ratledge].
4. "Useful Interactions in Econometric Models: The Case of Black/White Earnings Differentials" (American Statistical Association Meetings, August 1974).
5. "Competition and Centralization of Professional Labor Markets: The Case of School Teachers and Nurses" (Eastern Economic Association Meetings, October 1974), [with John Landon].
6. "Discrimination in the Labor Market: An Economic Analysis of Racial and Sex Differentials in Earnings" (Joint American Economic Association and Econometric Society Meetings, December, 1974), [with Edward Ratledge and Kenneth Lewis].
7. "Market Structure and Public Education: A Simultaneous Equation Econometric Model" (Joint American Economic and Econometric Society Meetings, December 1974), [with John Landon].
8. "A Simultaneous Equation Model of Achievement: The Case of A Large Urban School District" (American Statistical Association Meetings, August 1975).
9. "The Supply and Demand for Registered Nurses" (Western Economic Association Meetings, June 1975), [with John Landon].
10. "Local Choice, School District Population Homogeneity and the Demand for Public Education" (Invited Paper ETA-NBER conference on research in the Economics of Education at Princeton, October 1975).
11. "The Impact of Economic Growth on Relative and Absolute Poverty" (Southern Economic Association Meetings, November 1975), [with James Thornton and Richard Agnello].
12. "The Minimum Wage, Its Influence on Teenage Unemployment and School Attendance" (Econometric Society Meetings, December 1975, [with Susan Brodsky].
13. "Wealth Neutrality and the Courts: An Econometric Model of School Finance" (Southern Economic Association Meetings, November 1977). [Charles Link, et al.]
14. "A Simultaneous Equation Tobit Model of Labor Supply: The Case of Registered Nurses" (Southern Economic Association Meetings, November 1977).

15. "Wealth Neutrality and the Courts: An Econometric Model of School Finance" (Econometric Society Meetings, December 1977). [Charles Link, et al.]
16. "Labor Supply Responses of Married Professional Nurses: New Evidence" (American Economic Association, August 1978) [with Russell Settle].
17. "Wage Incentive and Married Professional Nurses: A Case of Backward Bending Supply" (Eastern Economic Association, May 1979) [with Russell Settle].
18. "Benefits and Costs of the Medicare Program by State, 1967-1975," (American Public Health Association, November 1979) (with Stephen Long and Russell Settle).
19. "Access to Medical Care Under Medicaid: differentials by Race," (American Public Health Association, November 1980) (with Stephen Long and Russell Settle).
20. "The Impacts of Medicaid and BCHS Projects on Access to Medical Care," Invited paper at the American Public Health Association Meetings, November 2, 1981 (with Stephen Long and Russell Settle).
21. "Access to Medical Care Under Medicaid: Differentials by Race," Invited paper at the Southern Economic Association Meetings, November 5, 1981 (with Stephen Long and Russell Settle).
22. "The Effect of Medicaid Cutbacks on Access to Health Care Among Medicaid Recipients," (Health Economics Research Organization and American Economic Association Washington, D.C., December 1981) (with Stephen Long and Russell Settle).
23. "The Supply of Professional and Nonprofessional Nurses," presentation to officials of the Division of Nursing, U.S. Department of Health and Human Services, April 1981 (with Russell Settle).
24. "Access to Medical Care Under Medicaid: Differences Between Southern Whites and Blacks" (Southern Economic Association, November 1981).
25. "The Use of Plato in the Principles of Economics Course" (Southern Economic Association, November 1983).
26. "The Cost of Court Continuances"(American Society of Criminology, October 1986)[with E. Ratledge and Joan Jacoby].
27. "An Economist's Perspective of the Nurse Shortage, " June 1987, conference at the University of Pennsylvania. [Invited paper supported by the Commonwealth and Pew Foundations].

28. "How Cost Effectiveness Studies Suffer from Bad Methodology" (American Society of Criminology, Nov. 1987)[with E. Ratledge].
29. "Income Elasticity of Demand for Health Care in OECD Countries" (American Public Health Association Meetings, Boston, November 2000).
30. "Is Health Care a Normal Good at the Macro-Country level?" International Health Economics Association, York, England, Summer 2001
31. "Variations in the Prescribing Patterns of Atypical Antipsychotics: A Multinomial Analysis of the NHAMCS and NAMCS Surveys, 1992 – 2000" International Health Economics Association, San Francisco, CA June 2003.
32. "Why does the Relationship between Economic Status and Child Health Strengthen for Older Children in the U.S.? Evidence from the Medical Expenditures Panel Survey and the Panel Study of Income Dynamics International Health Economics Association, Barcelona Spain, July 2005.
33. "Physician Prescribing Patterns for Statins," American Society for Health Economists meetings, June 2006, in Madison, WI.
34. "Physician Prescribing Patterns for Statins, the case of Diabetics, European Health Economics Association meeting, July 2006, Budapest, Hungary.
35. "Factors Affecting the Demand for Dental Care," International Health Economics Association, Copenhagen Denmark, July 2007.
36. "Who Receives Statins? Variations in Prescribing Patterns for Patients with Coronary Heart Disease, Dyslipidemia, and Diabetes," International Health Economics Association, Copenhagen Denmark, July 2007.
37. "The Effects of Dental Insurance on Dental Expenditures in the U.S." American Society for Health Economists, Duke University, June 2008.
38. "The Effects of Diabetes, Obesity, and Hypertension on Health Expenditures in the U.S., International Health Economics Association meeting in Toronto in July 2011.
39. "Racial Differences in the Effects of Hypertension and Obesity on Health Expenditures and Resource Use by Diabetes Patients in the U.S., American Society for Health Economists, Minneapolis, June 6, 2012
40. "Quantile Regressions and Racial Differences in the Effects of Hypertension and Obesity on Health Expenditures and Resource Use by Diabetes Patients in the U.S.," Western Economics Association, San Francisco, June 28, 2012.
41. (with Simon Condliffe) "Determinants of Dental Expenditures," Eastern Economic Association Meetings, May 10, 2013 in N.Y.

42. (with Simon Condliffe) “Determinants of Dental Expenditures,” Western Economic Association Meetings, June 28, 2013 in Seattle.
43. (with Simon Condliffe) “Quantile and IV Regression analysis of Dental Care Expenditures and Utilization” Presented in June 2014 at the American Society of Health Economists.
44. (with Simon Condliffe) “Quantile and IV Regressions of Health Care Expenditures and Utilization Among Diabetes {patients with Comorbid Hypertension and Obesity” Presented at the Western Economic Association Meetings in June 2014.
45. (with Simon Condliffe) “The Labor Supply of Registered Nurses, 2008,” Presented at the International Health Economics Association Meetings in June 2015 in Milan, Italy.
46. (with Simon Condliffe and Sezin Zengin) “Labor Supply Behavior of Registered Nurses in the 21st Century,” Presented at the Western Economics Association Meetings in Portland, OR, in June 2016.
47. (with Simon Condliffe) “The Impact of Adult Medicaid Dental Coverage on Utilization and Expenditures,” Presented at the Western Economics Association Meetings in Portland, in June 2016.
48. (with Simon Condliffe and Sezin Zengin) ““Labor Supply Behavior of Registered Nurses in the 21st Century,” Presented at the American Society of Health Economists meetings in Philadelphia, PA in July 2016.
49. (with Simon Condliffe) “The Impact of Adult Medicaid Dental Coverage on Utilization and Expenditures,” Presented at the American Society of Health Economists in Philadelphia, PA in July 2016.
50. (with Simon Condliffe) “The Impact of Adult Medicaid Dental Coverage on Utilization and Expenditures,” Presented at the Western Economic Association meetings in San Diego in June 2017.
51. (with Simon Condliffe) “The Impact of Adult Medicaid Dental Coverage on Utilization and Expenditures,” Presented at the International Health Economic Association meetings in Boston in July 2017.
52. (with David Hunt) “Better Outcomes at Lower Costs? The Effect of Public Health Expenditures on Hospital Efficiency,” Presented at the International Health Economic Association meetings in Boston in July 2017.
53. (with Simon Condliffe) “Access to Dental Care by Low Income Adults, the Role of State Medicaid Programs,” Presented at the Western Economic Association meetings in Vancouver, Canada in June 2018.”

54. (with Simon Condliffe) "The Effect of Obesity on Wages of Chinese Workers," Presented on July 15, 2019 at the International Health Economics Association Meetings in Basel Switzerland.
55. (with Yifan Zhu and Simon Condliffe) "Medicaid's Effect on Adult Dental Utilization: Does the Extent of Coverage Matter?" presented in June 2021 at the Western Economic Association Meetings.
56. (with Yifan Zhu and Simon Condliffe) "'Effect of Medicaid Dental Coverage on Dental Care Utilization Among Low-Income Adults," presented in July 2021 at the International Health Economic Association Meetings.
57. (with Yifan Zhu and Simon Condliffe) "'Effect of Medicaid Expansion on Improving Dental Care Outcomes," presented in July 2022 at the Western Economic Association Meetings.
58. (with Yifan Zhu and Simon Condliffe) "'Effect of Medicaid Expansion on Improving Dental Care Outcomes," presented in June 2022 at the ASHE meetings.
59. (with Yifan Zhu and Simon Condliffe) "'Effect of Medicaid Expansion on Improving Dental Care Outcomes," presented in June 2023 at the Western Economic Association meetings.

G. Reviewer of Articles for the Following Journals

1. Journal of Human Resources
2. American Economic Review
3. Review of Economics and Statistics
4. Journal of Business
5. Sociology of Education
6. Economics of Education Review
7. Economic Inquiry
8. American Educational Research Journal
9. Southern Economic Journal
10. Journal of the American Statistical Association
11. Quarterly Journal of Economics
12. Growth and Change
13. Journal of Health Economics
14. Industrial and Labor Relations Review
15. Review of Educational Research
16. Eastern Economic Journal
17. Journal of Labor Research
18. Journal of Economic Education
19. Economic Journal
20. Eastern Economic Journal
21. Quarterly Journal of Business and Economics
22. Comparative Economics
23. Health Policy
24. Journal of Health Economics

25. Journal of Health Care Finance
26. Review for Contemporary Economic Policy
27. Empirical Economics
28. International Journal of Sport Finance
29. Oxford Economic Papers
30. Contemporary Economic Policy
31. Empirical Economics
32. Applied Economics

III. Teaching

A. Courses Taught

1. Lower Level Undergraduate
 - a. Introduction to Macroeconomics
 - b. Introduction to Microeconomics
 - c. Money and Banking
2. Upper Level Undergraduate
 - a. Economics of Human Resources
 - b. Economics of Poverty and Discrimination
 - c. Labor Economics
 - d. Income Distribution
 - e. Intermediate Microeconomics
3. Graduate Level
 - a. Microeconomic Theory
 - b. Urban Labor Markets
 - c. Labor Economics

B. International Elements

1. Was in the first contingent to go into Sofia, Bulgaria, for the fall semester of 1991 where I taught a principles of economics course and an advanced micro course (similar to EC801)
2. In 1992, developed and initiated the Economics Department London-Europe program. Prof. Butkiewicz was a co-director in 1992; Dave Black was a co-director with me from 1993-2002.
3. For Winter Session 2003, a program in Australia and New Zealand was developed. The program was greatly expanded and enriched in 2004, 2005, 2006, and 2007. I was the principal director.

C. Published Multimedia CD

Microeconomics (McGraw Hill, 1997) Multimedia interactive presentation of the principles of microeconomics and macroeconomics

D. Teaching Awards

1. Nominated for Teaching award by Panhellenic Association, 1993.
2. Department of Economics Excellence in Teaching Award: 1994 -1995.
3. University of Delaware Excellence in Teaching Award, 2000 (4 are given at the University level each year – this is a student based award)
4. Alfred Lerner College of Business and Economics Outstanding Teacher Award, 2014

E. Honors

1. Improvement of Instruction Grant (Summer 1971) to develop the Economics of Poverty and Discrimination course.
2. Grant (with Jeffrey Miller)
Improvement of Instruction Grant (Summer 1981) to develop a test bank for economics 151 and 152).
3. I was an investigator in the CAUSE grant funded by NSF. My role in the project was to write three lessons that apply to both Math 115 and EC 151. The three lessons I wrote cover 1) production functions, 2) cost curves, and 3) profit maximization.
4. Published lessons for Principles of Economics for Dryden Press, (Summer 1986).
5. Second Edition of Econograph: Econograph II, Link, Miller, and Bergman, Dreyden Press, 1988.
6. Bulgarian Grant participant (fall semester, 1991)
7. Center for Advanced Studies: Teaching: 1996-1997 academic year
8. Multimedia CD “Microeconomics” with McGraw-Hill, 1997.

F. PLATO

1. Helped expand and improve the EC 151-152 package (1979-85).
2. Other teaching
I was the driving force behind the PLATO test bank for EC 151 and EC 152. We had over 650 questions (with diagnostics) operational. This took several hours per week. It should be noted that most principles instructors (and some 302 and 401 instructors) made heavy use of this bank.

G. Major Advisor for M.A. Theses

Sharon Brucker (1974) - Major Advisor
Susan Brodsky (1976) - Major Advisor
Bob Van Giezen (1977) - Major Advisor
Jerry Russo (1980) - Reader
Greg Morrison (1980) - Reader
David Keeler (1980) - Major Advisor
Howard Stone (1980) - Major Advisor
Tom Marshal (1982) - Major Advisor
Manshee Lee (1982) - Major Advisor
Todd Glandon (1983) - Reader
Eddie Epstein (1984) - Major Advisor
Robert Weldin (1984) - Major Advisor
John Burgess (1983) - Major Advisor
Jean Kimmel (1984) - Major Advisor

Rosemary Hoffman (1984) - Major Advisor
Mike Smolens (1985) - Major Advisor
Chi Liang Huang (1985) - Major Advisor
Ying Qian (Summer 1986) - Reader
Jerry Gallagher (Spring 1987) - Major Advisor
Barney Cohen (Spring 1987) - Reader
Karen O'Neill (May 1989) - Major Advisor
Debbie Kessler (May 1989) - Major Advisor
Luis Garrido (1990) - Major Advisor
Paul Miller (1991) - Major Advisor
Rong Hu (1992) - Reader
Mary Allenburg (1992) - Reader
Whitney Townsend (1994) - Major Advisor
Kurt Schlauch (1994) - Major Advisor
Evan Haggett (1994) - Major Advisor
Adrian Peoples (1997) - Major Advisor
Yvana Chiha (1996) - Major Advisor (Notre Dame, Lebanon)
Keith Gorman (2001)-Major Advisor
Mike Pollack (2002)-Major Advisor
Martin Yosifov (2002)-Major Advisor
John Angel (2003)-Major Advisor
Marin Gemmill (2003) – Major Advisor
Bryan Townsend (2003)-Major Advisor
Xuan Jiang (2004) – Major Advisor
Neeraj Nagpol (2004) – Major Advisor
Lydia Royer (2005) - Major Advisor
Raghu Sunderrajan (2005) - Major Advisor
Ryan Sweet (2005) – Major Advisor
Katie McCann (2005) – Major Advisor
John Angel (2005) – Major Advisor
Debaratti Datta (2005) – Major Advisor
Phil Facciollo (2005) – Major Advisor
John Goodenough (2006) – Major Advisor
Shamis Mohamoud (2006) – Major Advisor
Nayala Dahan (2007) – Major Advisor
Chris McCleer (2007) – Major Advisor
Jill Kreston (2008) - Major Advisor
Mike Bratus (2008) - Major advisor
Gigi Cuckler (2008) – Major Advisor
Eric Best (2010) – Major Advisor
Kevin Clark (2010) – Major Advisor
Art Pelullo (2010) – Major Advisor
Keith Oetting (2010) – Major Advisor
Dan Culbertson (2011) – Major Advisor
Kevin Prendergast (2012) – Major Advisor
Agnijit Das Gupta (2012) – Major Advisor for Masters Thesis
Yi Zhong (2013) – reader (she is an ag econ Masters Student)
David Becker (2015) – Major Advisor

H. Ph.D Doctoral Dissertations

Tevfik Aksoy (1995) - Major Advisor
 Piyali Sengupta (1998) Reader (Jadavpur University, Calcutta, India)
 Yvana Chiha (2000) - Major Advisor
 Andrew Hill (2003) - Major Advisor
 Tom DePalma (2004) - Co-Major Advisor with Robert Schweitzer
 Martin Yosifov (2006) – Major Advisor
 Daniel Brown (2009) – Major Advisor
 Nayla Dahan (2010) – Major Advisor
 Shenglan Mao (current) – Major Advisor
 Bogdan Nedanov (2013) – Major Advisor
 Sezin Zengin (2016) – Major Advisor
 David Hunt (2016) – Major Advisor
 Hao Liu (2016 May 2018) – Major Advisor
 Sarah Reed (2016-May 2018)—Reader
 Laura Ahlstrom (2017-May 2018) -- Reader
 Shengnan Dai (Fall 2020) → Major Advisor
 Yifan, Zhu, May 2019 Spring 2021) → Major Advisor
 David Mahon (Spring 2022 – finished) → Reader
 Jiani Li (June 2022- finished) → Reader
 Tongxi Zhao (June 2022 – finished) → Reader
 Justin Coger Major Advisor (finished Nov 2022 →Major Advisor

I. Reader for Graduate Student in Agriculture

Greg Kuserk

J. Undergraduate Special Projects for Statistics Department

- a. Sohail Majid (Spring 1986)
- b. Rosalind Vinci (Fall and Winter 1986)
- c. Rebecca Warnock (Summer and Winter 1999)
- d. Phil Facciolo (Fall 2003)
- e. Dan Brown (Spring 2004)
- f. Tess Bienke (Spring 2004)
- g. Alex Gross (Spring 2007)
- h. David Giattino (Spring 2008)

K. Degree with Distinction and Honors Theses

- a. Mark Davidson (1981) - Major Advisor
- b. Jennifer James (1987-88) - Major Advisor
- c. Steven Hess (1989) - Reader
- d. Alex Settles (1991) - Major Advisor
- e. Adam Carmichael (1994) - Major Advisor
- f. Emily Lehman (1996) - Major Advisor
- g. Eric Heisler (1996) - Major Advisor
- h. John Petrizzo (1997) - Major Advisor
- i. Patti Powers (1998) Major Advisor
- j. David Giattino (2007) Major Advisor
- k. Alex Gross (2007) Major Advisor
- l. Darren Mooney (2008) Major Advisor

- m. Katie Dwyer (May 2010) Major Advisor
- n. Seth Rubin, Major Advisor (May 2013)
- o. Samuel Kim, Reader (May 2013)
- p. Alex Gross (May 2014) Major Advisor
- q. Bassam Khatri (2016-2017) Reader

L. Special Projects with Graduate Students

- a. Elaine Gilby (1987-88)
- b. Karen O'Neill (1987-88)
- c. Luis Garrido (1989)
- d. Bryan Townsend (2001)
- e. Stacy Savickas (2002)

M. Presentations

To the teachers in Professor Jim O'Neill's masters program. (Several presentations over the time period August 1988 through Summer 1995 and in the Summer of 2003)

Spoke on nurse labor supply of registered nurses to members of the U.D. nursing college (Nov. 1989)

Taught major part of the Micro to MA program for Professor O'Neill (Summer 1995)

Made presentation in Fall 2000 to the UD TAs as part of the TA orientation.

Made several presentations in the past 3 years to various University of Delaware groups on the use of Multimedia in the classroom (e.g. College of Arts and Science Curriculum Committee and multimedia users group the latest being June 2008)

Made presentation on April 28, 2004, at Christiana Care entitled "U.S. Health Care System. Crisis? Reform? Can We Learn Something from Down Under"

Presentation to 250 students in May of 2007 on "Reflections of an Economist on the Economics of Major League Baseball."

Public Presentation in 115 Purnell in October 2016, on the 'Economics of immigration'.

Nobel prize presentation – November 2021 (public presentation)

IV. Community and University Service

A. Committees

- 1. Department
 - 1. Committee to Reorganize the Undergraduate Curriculum (1972-73)
 - 2. Principles Committee (1973-74, 1991-95, 1999-2002)
 - 3. Computer Committee (1974-75)
 - 4. Graduate Committee (1975-76)
 - 5. Ad Hoc Committee on the M.A. (1976)
 - 6. Department Chairman Search Committee (1975-76)
 - 7. Ad Hoc Committee on PLATO (1979-80) - Chairman
 - 8. Masters Committee (1970-72, 78-79, 81-83)
 - 9. Chairman, Promotion and Tenure Committee (1981-83, 84-85, 2003-2004, 2012-2015, 2016-2017)
 - 10. Recruitment Committee (1971-73, 74-77, 82-85, 87-88, 89-90)

Co-Chair Recruitment Committee (1990-91)

11. Ad Hoc Committee on Restructuring EC 101 - 102 - Chairman (1983-84)
 12. EC 151 Coordinator (1987-89, 91-99)
 13. Undergraduate Curriculum Committee (1970-72, 74-76, 77-78, 88-89, 92-93, 2001-2003)
 14. Research Release Committee (1987-91)
 15. Evaluation Advisory Committee (1991-92)
 16. Chairman, Workload Policy II, (1990-92)
 17. Chairperson, Promotion and Tenure (1992-93 & 2003-2004)
 18. Student honors and College Teaching Award (1995 - 96)
 19. Chairman of Promotion and Tenure Committee (from Spring 2003 through the Spring semester of 2004 – 3 semesters)
 20. Library coordinator (2006-2012)
 21. Undergraduate curriculum committee (2008-2009)
 22. Document Review/Post Tenure Review (2010)
 23. Chairman of Promotion and Tenure Committee (from fall 2011 thru 2017)
 24. Undergraduate Curriculum Committee (2015-2016)
 25. Chairman of Promotion and Tenure Committee (from fall 2017-18)
 26. Chairman of Promotion and Tenure Committee (Through spring 2018)
 27. Chairman, undergraduate research committee (2020-2021)
 28. Student honors committee (Fall 2018 – 2021)
 29. Undergraduate Curriculum committee (2020-2023)
2. College
- a. Committee on Honors and Student Life (1971-72)
 - b. Ad Hoc Committee on College Constitution and By-Laws (1971-72)
 - c. Faculty Affairs (1972-73)
 - d. The Committee on Student Life (1973-74)
 - e. Ad Hoc Committee to Improve the Bureau of Business and Economic Research (1973-74)
 - f. Committee on Student Life (1974-76)
 - g. Dean Search Committee (1975-76)
 - h. Dean's Advisory Committee (1975-76)
 - i. Promotion and Tenure Committee (1981-89)
 - j. Promotion and Tenure Committee (1982-83) - Chairman
 - k. Computer Committee (1982-85)
 - l. Chairman, Search Committee for Business Administration (1987-88)
 - m. Local Area Network Committee (1989-92)
 - n. Chairman, Promotion and Tenure Committee (1991, 1992)
 - o. Computer Advisory Committee (1995)
 - p. IT committee 1998 – now
 - q. Committee on Organization 2001-2004
 - r. Promotion and Tenure Committee 2003-2004
 - s. Promotion and Tenure Committee 2006 – 2011
 - t. Promotion and Tenure Committee 2015- 2017
 - u. Chairman, Promotion and Tenure Committee 2016- 2017
 - v. Undergraduate curriculum committee 2020 – 2021 (thru spring 2021)

3. University

- a. Undergraduate Curriculum (1972-73)
- b. Undergraduate Curriculum (1973-74)
- c. Subcommittee on Computer Software Acquisition and Development. (1974-75)
- d. Advisor to the Commission on the Status of Women (1979)
- e. Provost's Ad Hoc Committee on Gerontology (1982-83)
- f. University Conversion to IBM (1984-85)
- g. Statistical Laboratory Advisory Committee (1987-present)
- h. Committee to Select Fellows for the Center for Advanced Study (1985 and 1987)
- i. Task force for creating a joint program in medical education between the University of Delaware and The Jefferson Medical Center (1988-91)
- j. CNS User Services Faculty Advisory Committee (1988-1993)
- k. Committee on Multimedia (1995 - 96)
- l. Committee on University Book Store Vendor (1996)
- m. Faculty Senate: 1998 – 2002
- n. Library Committee: 2005 – 2011
- o. Committee on Retired Faculty 2008-2012

B. Professional Service

1. Scientific Review Committee for the American Society of Health Economists 2014 and 2016, 2019, 2021, 2022 (This involved reviewing and rating abstracts for papers proposed for presentation at the ASHE meetings.)
2. Scientific Review Committee for the International Health Economics Association in 2013, 2015, 2017, 2019, 2021 and 2022 (As with ASHE, this involved reviewing and rating abstracts for papers proposed for presentation at the ASHE meetings.)

C. Community Service

1. Department Representative for the United Fund (1971-72)
2. Involved in seminars (Spring 1972) on "Changing After 35."
3. Involved in the public lectures on the Wage-Price Controls. Delivered talk on the causes of inflation (1971).
4. A seminar on public utilities that took place in Hershey, Pennsylvania and was sponsored by the Bell Telephone Company (June 1972).
5. Consultant to New Castle County in an evaluation of the Farmland Assessment Act, 1984.
6. Advisor to Women's Equity Action League (Washington, D.C.) 1987.
7. Board of Advisors for Commonwealth Foundation on a Grant Project to the American Hospital Association (1987, 1988, 1989).
8. Advisor to Project Hope, 1989.
9. Member of the Strategic Planning Committee of Christiana Care Corp (One of the largest Medical Centers in the U.S. with revenues of about a billion dollars. Members are comprised of former CEOs and high level executives and Doctors) 1999 - 2004

D. Invited Papers - Community and University Service

1. October 1976, presented speech to Delaware Chief School Officers Association entitled, "Equity in School Finance in Delaware."
2. June 1977, presented speech to the Delaware State School Board, "Is the School Finance Scheme in Delaware Equitable."
3. Fall 1977, presented speech to the Delaware Chief School Officers Association entitled, "School Finance in Delaware."
4. Fall 1978, presented speech to the Delaware Chief School Officers Association entitled, "Equity in School Finance in Delaware: The Final Report."
5. Fall 1978, presented speech to the State School Board entitled "Equity in School Finance in Delaware: The Final Report."
6. Fall 1979, gave speech to the School Finance Study Committee (formed by State Legislature to analyze the educational system in Delaware (entitled, "An Evaluation of the Delaware State Public Elementary and Secondary Education Equalization Laws."
7. Fall 1979, panel member for a program sponsored by the League of Women Voters of Greater Wilmington. The title for the program, "Schools, How to Pay for Them." I gave a presentation entitled, "Limitations in the Delaware School Finance System."
8. February 1986, made presentation on the British National Health Care System for the First Presbyterian Church in Newark.
9. December 1986, made presentation to the fellows of the Center for Advanced Study (as well as the President Provost and other persons from the University) concerning "The Nurse Labor Market."
10. June 1987, made presentation to Blue-Cross executives concerning "The Nurse Labor Market."
11. Invited presentation at one of Provost Campbell's dinner meetings for faculty. Topic: "Nurse and Major League Baseball Players' Labor Markets" (April 1988).
12. Spoke about the U.S. AID Bulgaria Project (December 1991).
13. Spring 1994, two, one hour interviews on major league baseball for WVUD.
14. Spring 1994, one hour interview on major league baseball for WILM.
15. Spring 1994, one hour talk show on Sports for WDEL.
16. Presentation to Rotary Club on Major League Baseball Strike (September 1994).
17. Summer 1994, one hour talk show for Rehoboth Radio Station.
18. Summer 1994, 3-10 minute interviews on WHYY TV relating to the Major League Baseball Players strike.
19. Spoke at Deans Breakfast Series (April 1995)"Finances in Major League Baseball."
20. Interview on WDEL with Bill Komiseroff (March 1995)
21. Interview on WVUD (April 1995)
22. Spoke to teachers on the Economics of Baseball (for Bonnie Mezaros) (March 1996)
23. Spoke to Multimedia Users Group (Spring 1996)
24. Spoke to the Arts and Science curriculum committee on the use of multimedia in the classroom (spring 1997)
25. Invited to speak to the Delaware Statistical Society on the "Effects of Homework on Math Achievement" (Fall 1998)

26. Spoke of 500 lawyers at the annual meeting of the Delaware Trial Lawyers Association, "Economists and their Role in Litigation". Jan. 1999
27. During fall of 2000: I did several interviews with reporters from Newspapers in St. Petersburg Florida, Dallas Texas, USA Today, and The Washington Post concerning the signing of Alex Rodriguez for a \$250 million 10 year contract. I was quoted in these was newspapers. I also did a talk show with the station in Corpus Christi, Texas during that time on the same subject.
28. During the winter of 2001 while I was in Australia an interview took place with reporters from 60 minutes having to do with a segment that Leslie Stahl did on the player agent Scot Boras. Material given during the interview was used in the 60 Minutes segment which aired in March 2001.
29. Did an interview on WHYY TV in April 2000 on the Economics of Baseball.
30. Did interviews during the fall of 2001 on the subject of contraction in major league baseball. Newspapers included the ones in St. Petersburg, Minneapolis, Milwaukee, and Montreal.
31. Did a talk show on NPR on April 1, 2002 on the economics of Major League Baseball. (Panel included me, Dave Davies (Philadelphia Daily News), and David Montgomery (President and CEO of the Phillies).
32. Several interviews with the news media in 2002 concerning the downsizing in Major League Baseball, the labor contract negotiations, as well as other issues surrounding the economics of Major League Baseball.
33. Several interviews with the news media in 2003 – 2004 regarding the economics of Major League Baseball.
34. Presentation on April 28, 2004, at Christiana Care Corp: "The Economics of Health Care in the US. What Can We Learn from Down under?"
35. Presentation about the 2021 recipients of the Nobel Prize for Economics (November 9, 2021)