

Michael C. Newman

Current Title: Professor

A. Marshall Acuff, Jr. Professor of Marine Science

WORK

Virginia Institute of Marine Science
School of Marine Science
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EDUCATION

1981 Ph.D. Rutgers University, Environmental Sciences
1980 M.S. Rutgers University, Environmental Sciences
1978 M.S. University of Connecticut, Zoology
1974 B.A. University of Connecticut, Biology

ACADEMIC POSITIONS

2011-14 **VISITING PROFESSOR.** College of Life Science, Huazhong Normal University (华中师范大学).

1998-12 **PROFESSOR OF MARINE SCIENCE.** The College of William and Mary, Virginia Institute of Marine Science/School of Marine Sciences.

1998-10 **SPECIAL GOVERNMENT EMPLOYEE.** Special employee serving on SAB and other EPA committees, and a National Academy of Science committee.

1999-02 **DEAN OF GRADUATE STUDIES.** The College of William and Mary, School of Marine Science (SMS). As the Dean of Graduate Studies, directed the SMS Graduate Studies Program. Acting Dean of School of Marine Science during Dean's absence; Acting Director of Virginia Institute of Marine Science (VIMS) during the absences of VIMS Director and Director of Research and Advisory Service.

1996-97 **SENIOR RESEARCH ECOLOGIST.** University of Georgia, Savannah River Ecology Laboratory (SREL).

1996-97 **HEAD.** Ecological Toxicology, Remediation, and Risk Assessment (ETRRA) Group composed of eight faculty members and thirty technical staff. University of Georgia, SREL.

1990-96 **RESEARCH ASSOCIATE ECOLOGIST.** University of Georgia, SREL.

1983-90 **RESEARCH ASSISTANT ECOLOGIST.** University of Georgia, SREL.

1983 **POSTDOCTORAL FELLOW.** University of California--San Diego.

1982 **POSTDOCTORAL RESEARCH ASSOCIATE.** University of Georgia, SREL

1980-81 **GRADUATE RESEARCH ASSISTANT.** Rutgers University, Institute of Coastal and Environmental Studies.

1977 **SENIOR RESEARCH TECHNICIAN III.** University of Delaware, College of

Marine Studies.
1975-76 **SPECIAL RESEARCH TECHNICIAN, GRADUATE RESEARCH ASSISTANT.** University of Connecticut, Marine Research Laboratory.

ADJUNCT FACULTY STATUS

2011-14 College of Life Science, (Central China) Huazhong Normal University (华中师范大学); Visiting Professor.
1995-02 University of Georgia; Taught graduate course through Institute of Ecology (Interdisciplinary Toxicology Program) every other year.
1995-98 Clemson University, Department of Environmental Toxicology, Associate Professor.

ADMINISTRATIVE TRAINING, EXPERIENCE AND RECOGNITION

2007 **Member**, Administrative Review Committee for Provost, College of Liberal Arts and Sciences.
2002 **Special Recognition** by VIMS Advisory Council for exceptional service as Dean of Graduate Studies. The Advisory Council is composed of regional leaders who provide guidance to VIMS relative to strategic planning, fund raising, education, and regional service.
2002 **Chair**, Administrative Review Committee for VIMS/SMS Director of Planning and Budget.
2001-02 **Head** of ITNS and administrative team charged with acquiring funds for, formulating plans for, and installing state-of-the-art instructional technologies at the School of Marine Science.
2001 **Chair**, Administrative Review Committee for VIMS Director of ITNS
1999 **Chair**, Administrative Review Committee for VIMS Director of Research and Advisory Service.
1999-02 **School of Marine Science Member.** College of William and Mary Graduate Studies Council. This council supports and makes recommendations to the Provost on issues of graduate programs and fosters implementation of college-wide issues
1999-02 **Member**, VIMS Administrative Council
1999-02 **Dean of Graduate Studies**, The College of William and Mary, School of Marine Science (SMS).
1996-97 **Head.** University of Georgia=s SREL. Ecological Toxicology, Remediation, and Risk Assessment (ETRRA) Group. Groups at the Savannah River Ecology laboratory are similar to university departments.
1983-87 **Head.** University of Georgia' s SREL Water Quality Laboratory (Supervised 11 technical and clerical staff).
1983-87 American Management Association course work in the following topics: *Management for First Line Supervisors, Effective Communication Skills and Techniques, and Basic Management Skills.*

EDITORIAL POSITIONS

- Current **Editor** of book series, *Environmental and Ecological Risk Assessment*, CRC/Lewis Press (since 2000).
- 2007-10 **Editor (Critical Reviews)**, *Environmental Toxicology and Chemistry*
- 2000-07 **Editor (Aquatic Toxicology)**, *Environmental Toxicology and Chemistry*
- 2000-06 **Associate Editor** for *Ecotoxicology*
- 1999-03 **Member of Editorial Board** for *Risk Analysis: An International Journal*
- 1994-99 **Editor (Aquatic Toxicology)**, *Environmental Toxicology and Chemistry*
- 1994-98 **Member of Editorial Board** for *Archives of Environmental Contamination and Toxicology*
- 1994-98 **Member of Editorial Board** for *Advances in Trace Substances Research*
- 1997 **Member of Standard Methods Committee** (AWWA-APHA-WEF) Joint Task Group for Section 8420 Rotifers; *Standard Methods for the Examination of Water and Wastewater*.
- 1995-96 **Member of Editorial Board** for series, *Current Topics in Ecotoxicology and Environmental Chemistry*
- 1992-94 **Editorial Board Member** for *Environmental Toxicology and Chemistry*

RECENT SIGNIFICANT AWARDS OR RECOGNITION

- 2011-14 **Visiting Lecturer/Scholar**. Huazhong Normal University (华中师范大学), Wuhan, P.R. China. Chinese government funding awarded for two teaching visits annually.
- 2011 **Erudite Scholar**. Scholar in Residence Programme – The Erudite of Higher Education Council, Government of Kerala. Cochin University of Science and Technology, Cochin University, Kerala, India
- 2009 **Fulbright Senior Scholar**. University of Koblenz-Landau, Germany.
- 2008-12 **Named Professor**. A. Marshall Acuff, Jr. Professor of Marine Science. This named professorship is based on “achievements in scholarship, teaching, service and governance at VIMS/The College of William and Mary, and for the highest level of eminence outside the university.” This named professorship is renewable at five year intervals.
- 2007-2008 **Committee Member**. EPA Clean Air Scientific Advisory Committee for Lead. This committee successfully recommended an order of magnitude decrease in primary and secondary standards.
- 2006 **Recognition of Valued Service to EPA** (SAB service from 2001 to 2006)
- 2006-2007 **Certificate of Recognition for Outstanding Service**. National Academy of Science, Review of OMB Risk Assessment Bulletin.
- Committee Member**. NAS NRC Scientific Review Panel which successfully recommended rejection of a proposed OMB risk assessment policy initiative that would have fundamentally changed the manner in which the federal government conducted risk assessments. The committee’s recommendation was praised in the Wall Street Journal (January 11, 2007), Washington Post (January 12, 2007), and New York Times (January 12, 2007).

- 2005 **Fulbright Senior Specialist Program.** Awarded placement on roster for assignment to universities requesting engagement in teaching, research, or curriculum development, 5 year placement (2006-2010).
- 2004 **Recipient,** SETAC Founder's Award. According to the SETAC Award's Committee SOPs, "This award is the highest SETAC Award, given to a person with an outstanding career who has made a clearly identifiable contribution in the environmental sciences that is consistent with the goals of SETAC."
- 2002 **Special Recognition** by VIMS Advisory Council for exceptional service as Dean of Graduate Studies. The Advisory Council is composed of regional leaders who provide guidance to VIMS relative to strategic planning, fund raising, education, and regional service.

SCIENTIFIC ADVISORY AND STEERING GROUPS

- 2001-2012 DuPont South River Science Expert Panel
DuPont South River Innovative Remediation Committee
- 2010 Panel Member, EPA Lead NAAQS Workshop
EPA Advisory Panel Member, Environmental Impacts of Mountaintop Mining and Valley-fill Operations, and on Conductivity
DuPont South River Innovative Remediation Committee
- 2009 DuPont South River Innovative Remediation Committee
- 2008-2012 **Areas of Excellence Committee Member.** Hong Kong Universities Areas of Excellence, Center of Marine Environmental Research and Innovative Technology (MERIT).
- 2005-2012 **Associate.** WCA Environment Limited. Faringdon, Oxfordshire, UK.
- 2006-2011 **Owner.** Newman Environmental Consulting, Seaford, VA
- 2004-08 **Consultant** to Versar, Inc. review of EPA document, *Technical Review of Acetonitrile (Methyl Cyanide)*. Also, review of the EPA draft document, *Ambient Aquatic Life Criteria for Lead*.
Committee Member. EPA Clean Air Scientific Advisory Committee for Lead. 2007-2008.
Member of National Academy of Science NRC Review Committee for the OMB Risk Assessment Bulletin, 2006-2007.
Consultant to Versar, Inc. review of EPA document, *Draft Method 166A Interlaboratory Validation Study*, 2007.
Consultant to Versar, Inc. review of EPA document, *Draft Method III: Pesticides in Water, Soil, Sediment, Biosolids and Tissue by HRGC/HRMS*, 2007.
Consultant to Versar Inc. review of EPA document, *Estimation of Biota Sediment Accumulation Factor (BSAF) from Paired Observations of Chemical Concentrations in Biota and Sediment*, 2006.
Consultant to Versar, Inc. review of EPA formulation of toxic weighting factors in support of CWA 304(m), 2006.

Consultant to Versar, Inc. providing technical review of EPA Chromium Antimony Titanate assessment, 2006.

Member of EPA STAA 2006 Review Committee

Member of EPA EPEC Committee reviewing the federal government's implementation of ecological risk assessments, 2006.

Member of EPA Clean Air Lead Scientific Advisory Committee, 2006-2008.

Member of EPA SAB Ad Hoc Team to review EPA Region 6 sampling plan, Emergency response quality assurance sampling plan for Hurricane Katrina response support Interstate Highways 10 and 610 intersection, New Orleans, Orleans Parish, Louisiana.

Member, EPA SAB PCB Artificial reef risk assessment panel.

Member, EPA SAB Aquatic Life Criteria consultative panel.

Member, EPA SAB Region 6 GIS Screening Tool review panel.

Member. EPA SAB Scientific and Technological Achievement Awards Panel, 2005.

Member, EPA FIFRA Scientific Advisory Panel. Review of potential human and ecological risk from Widestrike cotton, a genetically modified cotton incorporating the BT gene.

Member. Virginia DEQ mercury contamination advisory panel.

Technical Support Consultant, TN&A/EPA-NCEA. Case study of incorporating empirical data and expert judgment in Bayesian Belief Networks (BBN) including Phase II, expert elicitation study.

Statistical Consultant. Fish & Wildlife Service (Gloucester Point, VA). Correlation between Peregrine falcon egg quality and chemical contaminants.

External Reviewer, DuPont. Quality review of scoping risk ecological risk assessment for VX nerve agent treatment hydrolysate.

Member, FIFRA Scientific Advisory Panel. Review and refine terrestrial and aquatic ecological risk assessment models.

2003

Recipient, SETAC Founder's Award. According to the SETAC Award's Committee SOPs, "This award is the highest SETAC Award, given to a person with an outstanding career who has made a clearly identifiable contribution in the environmental sciences that is consistent with the goals of SETAC."

Member, Virginia Dept. of Environ. Quality. Mercury Contamination Advisory Committee

Chair, SETAC Workshop (Mercury Monitoring and Assessment)

Reviewer of draft OECD Guidance document on the statistical analysis of ecotoxicity data.

Reviewer of industry position paper on chromium contamination in Baltimore Harbor for the Maryland Dept. of the Environment.

Reviewer of Baltimore Harbor contaminant modeling report for Maryland Dept. of the Environment.

Member of EPA SAB Scientific and Technological Achievement Awards 2003 Nominations Committee.

Member of EPA Committee providing guidance in development of national suspended and bedded sediment criteria.

Member of EPA EPEC Committee reviewing the federal government's implementation of ecological risk assessments (self-initiated study).

FWS Advisor, Holston River Assessment Plan for Saltville NPL Site.

FWS Advisor, Statistical analysis of peregrine falcon nesting success data for Mid-Atlantic region.

Reviewer of EPA Region II document, Sediment quality of the NY/NJ Harbor – A 5-year revisit.

Document Reviewer for VERSAR Inc., Preliminary administrative determination – ferric ferrocyanide qualifying as one of the “cyanides” .

Member of EPA Chesapeake Bay Toxics Advisory Committee.

Board Member, EPA Science Advisory Board (EPEC & Awards Committee duties).

2002 **Review Panel Member and Document Lead Author** for EPA Metals Assessment Workshop.

Review Panel Member for the U.S. EPA Atlantic Ecological Division.

Reviewer of the National Academy of Science report, *Progress towards Adaptive Monitoring and Assessment for the Everglades Restoration Plan*.

Expert Consultant to National Academy of Science (Everglades Ecosystem Assessment).

2001-03 **Member of Scientific Advisory Board** to EPA Administrator Whitman.

2001 **Member** of EPA Chesapeake Bay Office Science Advisory Panel

Reviewer of US DOE - Hanford risk assessment report for chromium

Consultant. TN & Associates. Statistical modeling of effects of Ahr-mediated toxicants on avian species.

Member, Virginia Department of Environmental Quality Scientific Advisory Panel.

Member, EPA Food Quality Protection Act (FQPA) Scientific Review Board.

Member, EPA FIFRA Scientific Advisory Panel (SAP - Nontarget Plant, Ecological Effects Test Guidelines).

Reviewer, Proposed Ph.D. program in marine biology at the University of North Carolina - Wilmington.

Peer Reviewer, *Preliminary Report: Interlaboratory Variability Study of EPA Short-term Chronic and Acute Whole Effluent Toxicity Test Methods (WET Study Report)*.

Member of EPA FIFRA Scientific Advisory Panel (SAP - Aquatic Effects Assessment).

2000-01 **Member** of SETAC Pellston Conference Steering Committee, Uncertainty Analysis in Ecological Risk Assessment.

2000 **EPA Evaluator**, *Sediment Quality of the New York/New Jersey Harbor*

- System - Trend Assessment.*
- 1999-01 **Member**, US DOE (Hanford Site) Risk Assessment, Science and Technology Needs Working Group.
- 1995-00 **Member**, OECD Working Group charged with revising standard statistical methods for analyzing ecotoxicity data (Nominated as one of three U.S. participants and accepted invitation in 1995 and 1996). One of two invited US members of the six-member Steering Group to draft recommendations for improving OECD guidelines.
- 1999 **Reviewer** selected by the EPA Office of Research and Development to assess the technical soundness of the document, *Comparative Ecological Risk Assessment. Ecological Risks to the Tampa Bay Ecosystem from Spills of Fuel Oil #6 and Orimulsion.*⁷
- 1997-99 **Member**, EPA work group on evaluating ecological risk and developing FIFRA probabilistic tools and processes.
- 1995-96 **Member** of complex-wide DOE Working Group for establishing data quality objectives for ecological assessments.
- 1994-97 **Savannah River Ecology Laboratory Liaison** to DOE Savannah River Site for ecological risk assessment activities.
- 1994 **Participant and Speaker**. Selected as one of eight US participants/speakers in a joint Israeli Institute of the Environment/US EPA workshop on monitoring and modeling water quality. The workshop was held in Haifa, Israel.

OFFICES IN PROFESSIONAL SOCIETIES

Miscellaneous

- 2009 **Session Co-chair**, The 9th International Conference on Mercury as a Global Pollutant, Guiyang, China.
- 2004 **Scientific Committee Member**, Lagoons and coastal wetlands in the global change context. Impacts and management issues (Venice, Italy)
- 2002 **Session Chair**, *Fish Physiology, Toxicology, and Water Quality (Tallinn, Estonia)*
Session Chair, Interact 2002 (Sydney, Australia)
Session Chair, Whole Effluent Toxicity Testing

Society of Environmental Toxicology and Chemistry

- 2010 **Workshop Instructor**, SETAC Asia/Pacific, Vietnam, Introduction to ecological risk assessment. Ho Chi Minh City University of Technology (140 students).
Session Co-chair, SETAC Asia/Pacific Meeting, Guangzhou, China
- 2003-04 **Short Course Instructor**, statistical analysis of ecotoxicity test data
- 2003 **Recipient**, SETAC Founder's Award
- 2002-03 **Chair** of steering committee that held the workshop, Mercury Monitoring and Assessment, in Pensacola, FL
Co-chair of session on mixture effects

- 2001 **Short Course Instructor**, Statistical analysis of toxicity data
Co-chair of session at annual SETAC Meeting Organizing Panel, Pellston Conference on *Uncertainty in Environmental Risk Assessment*
- 1998 **Planning Committee Member**, SETAC-Europe (UK) Meeting, *Improving Risk Assessment with Time-to-Event Methods*
- 1993 **Awarded Certificate of Appreciation** (1993) for committee and local chapter service
Organizer, Global Conference session, *Pollution Effects on Genetic Variation and Diversity* (Lisbon, Portugal)
- 1992-94 **Chair** of Awards Committee
- 1991-92 **First President** of Carolinas Regional Chapter
- 1991-92 **Member** of SETAC Regional Chapters Committee
- 1991-92 **Member** of SETAC Long Range Planning Committee
- 1990 **Chair** of session, Heavy metal contamination in aquatic systems
- 1990-91 **Founder** of Carolinas Regional Chapter
- 1988-92 **Member** of Awards Committee
International Conference on Metals in Soils, Waters, Plants and Animals
- 1990 **Member** of Program Committee
- 1990 **Chair** of special workshop, *Ecotoxicology of Metals: Current Concepts and Applications*. Coeditor of resulting book (Lewis Publishers)
- 1988-96 **Coordination** of vendor participation *South Carolina Laboratory Management Society*
- 1988-89 **Session Chair**
- 1989 **Board of Directors**
- 1988-89 **Chair** of Abstract Selection Committee

COURSES TAUGHT

(Student evaluation statistics provided for all cases in which they were available.)

- 2011 **Fundamentals of Ecotoxicology**. Huazhong Normal University. Wuhan, P.R. China. Co-instructor. (Graduate Course: 29 graduate students in May and another 2 graduate students in November).
- 2011 **Fundamentals of Ecotoxicology**. Huazhong Normal University. Wuhan, P.R. China. Co-instructor. (Undergraduate Course: 16 graduate students in November and another 60 in November).
- 2011 **How to Write a Scientific Paper in English**. Huazhong Normal University. Wuhan, P.R. China. Taught twice in May and November (5 hour short course, 32 graduate students; 52 undergraduate students in May; and another 60 undergraduate students in November).
- 2011 **Practical Environmental Statistics**. Huazhong Normal University. Wuhan, P.R. China. (Month short course, 23 contact hours)(23 graduate students).
- 2011 **Practical Environmental Sampling, Measurement, and Inferential Statistics**. MSCI642. (3 credits)(Fall Semester).
- 2011 **Quantitative Ecological Toxicology**. EHSC8630. University of Georgia. Athens, GA. (12 graduate students, one attended via distance learning.)

- Overall Course/Instructor Evaluation by Students (Based on 1 = poor to 5 = excellent): 4.8.
- 2010 **Practical Environmental Sampling, Measurement, and Inferential Statistics.** MSCI642. (3 credits)(Fall Semester).). Instructor Evaluation by Students (Based on 1 = poor to 5 = excellent): 4.8.
Ecological Risk Assessment Workshop. SETAC Asia/Pacific Meetings, Ho Chi Minh City, Vietnam. Ho Chi Minh City University of Technology. (140 students).
Fundamentals of Ecotoxicology. MSCI560 graduate course. (3 credits)(Spring Semester) Two students.
- 2009 **Practical Environmental Sampling, Measurement, and Inferential Statistics.** MSCI642. (3 credits)(Fall Semester). Instructor Evaluation by Students (Based on 1 = poor to 5 = excellent): 4.9.
Eutrophication and Environmental Risk Assessment. Summer course taught at Xiamen University, Xiamen, China. Team taught course with 74 graduate students who successfully competed for openings in this course.
Quantitative Ecological Toxicology. Summer course taught to College of William & Mary graduate students (4 students).
Quantitative Ecological Toxicology. EHSC8630. Summer course taught by distance teaching to University of Georgia graduate students (6 students).
Practical Concepts and Tools for Discerning Cause and Risk in the Presence of High Uncertainty. Short course at the University of Koblenz-Landau. Total of 30 students.
Quantitative Ecological Toxicology. Short course taught at the University of Koblenz-Landau (German) (18 students), Sole Instructor, Instructor Evaluation by Students (Based on 1 = poor to 5 = excellent): 4.7.
Writing an Excellent Publication and Giving and Excellent Talk. Workshop taught at the University of Koblenz-Landau (German) (70 students), Sole Instructor. Evaluation by Students (“[The workshop] was interesting”, 1=totally agree, 6=totally disagree): 1.46.
- 2008 **Ecological Risk Assessment: Theory and Practice.** Duke Environmental Leadership Program. Duke University. (ENV 442, 1 credit). Total of twenty-six students.). Instructor Evaluation by Students (Based on 1 = unsatisfactory to 5 = excellent): 4.6.
Practical Concepts and Tools for Discerning Cause and Risk in the Presence of High Uncertainty. Short course at the SETAC International Conference in Sydney, Australia. Total of twenty-four students.
Fundamentals of Ecotoxicology. ENSP440, MSCI560 and BIO440/504 cross listed undergraduate and graduate course. (3 credits)(Spring Semester) Total of fourteen students.
Independent Research. ENSP 490. Discussion and exchange course with counterpart in Wuhan, China. Three students. (1 credit)(Spring Semester)
Practical Environmental Sampling, Measurement, and Inferential Statistics. MSCI642. (3 credits)(Spring Semester). Instructor Evaluation by

- Students (Based on 1 = poor to 5 = excellent): 4.8.
- 2007 **Quantitative Ecological Toxicology.** EHSC8630 (4 credits). University of Georgia Interdisciplinary Toxicology Program. Fourteen graduate students. Visiting Lecturer/Adjunct Faculty, May Session, Sole Instructor, Instructor Evaluation by Students (Based on 1 = poor to 5 = excellent): 4.61.
Quantifying Lethal and Sublethal Effects: Theory and Practice. Short course. University of Hong Kong, Swire Institute of Marine Science and Department of Ecology and Biodiversity.
Practical Environmental Sampling, Measurement, and Inferential Statistics. MSC1642. (3 credits)(Spring Semester). Instructor Evaluation by Students (Based on 1 = poor to 5 = excellent): 4.91.
- 2006 **Fundamentals of Ecotoxicology.** ENST440 and BIO440/504 cross listed undergraduate and graduate course (3 credits)(Spring Semester). Thirteen students. Instructor Evaluation by Students (Based on 1 = poor to 5 = excellent): 4.80. College of William and Mary, Williamsburg campus.
- 2005 **Fundamentals of Ecotoxicology.** MS560 (3 credits)(Spring Semester). Seven graduate students. Sole Instructor. Instructor Evaluation by Students (Based on 1 = poor to 5 = excellent): 4.80.
Quantitative Ecological Toxicology. EHSC863 (4 credits). University of Georgia Interdisciplinary Toxicology Program. Eleven graduate students. Visiting Lecturer/Adjunct Faculty, May Session, Sole Instructor, Instructor Evaluation by Students (Based on 1 = poor to 5 = excellent): 4.70.
Statistical Analysis of Toxicity Data. Three day short course, at the request of Bayer Agrochemicals. Taught at Stillwell, Kansas facility with distance learning attendance for Raleigh, NC facility employees. Sixteen students.
- 2004 **Environmental Risk Assessment.** MS641 (3 credits). (Spring Semester). College of William and Mary's Virginia Institute of Marine Science. Two graduate students. Sole Instructor.
Quantitative Ecological Toxicology. MS640 (4 credits). One graduate student. Sole Instructor.
Quantitative Ecological Toxicology. Short course organized at the College of William and Mary (7 students). Sole Instructor.
Quantitative Ecological Toxicology. Short course taught at Jagiellonian University (Krakow, Poland). This university is the second oldest in Central Europe and is currently a European Community Centre of Excellence IBAES. (21 students) Sole Instructor. Rated by students as above average to excellent.
Taking the Pulse of Our Changing Planet. NSF-funded course for middle school teachers. (18 teachers). Member of team of Mid-Atlantic Educators funded to conduct this course. Qualitative student assessment of my assigned day of five day course: Interest – “Very”, Relevance – “Very”, Pace – “Just Right”, New Learning – “Just Right”
- 2003 **Quantitative Ecological Toxicology.** Short course taught at the University of Joensuu (Finland) (12 students), Sole Instructor. Instructor Evaluation by

Students (Based on 1 = poor to 5 = excellent): 4.73

Quantitative Ecological Toxicology. MS 640 (4 credits). Summer session College of William and Mary's Virginia Institute of Marine Science. One student. Sole Instructor.

Quantitative Ecological Toxicology. Short course organized at the College of William and Mary (4 students), Sole Instructor. Instructor Evaluation by Students (Based on 1 = poor to 5 = excellent): 4.75

Quantitative Ecological Toxicology. ECOL863-863L (4 credits). University of Georgia Interdisciplinary Toxicology Program. Twenty-four graduate students. Visiting Lecturer/Adjunct Faculty, May Session, Sole Instructor. Instructor Evaluation by Students (Based on 1 = poor to 5 = excellent): 4.45

Environmental Risk Assessment. MS 641 (3 credits). (Spring Semester). College of William and Mary's Virginia Institute of Marine Science. Two graduate students. Sole Instructor.

2002 **Quantitative Ecological Toxicology.** MS 640 (4 credits). First School of Marine Sciences course to be offered with distance learning technologies. College of William and Mary's Virginia Institute of Marine Science. Four students. Sole Instructor.

Quantitative Ecological Toxicology. Short course organized by the Australian Society of Ecotoxicology, University of Technology - Sydney (30 students), Sole Instructor. (No evaluations available)

Quantitative Ecological Toxicology. MS 640 (4 credits). (Summer Session). College of William and Mary's Virginia Institute of Marine Science. Six graduate students. Sole Instructor.

2001 **Quantitative Ecological Toxicology.** University of Antwerp, Belgium. Twenty-seven graduate students. Visiting Lecturer, Sole Instructor.

Quantitative Ecological Toxicology. ECOL863-863L (4 credits). University of Georgia Interdisciplinary Toxicology Program. Twenty graduate students. Visiting Lecturer/Adjunct Faculty, May Session, Sole Instructor. Course Instructor Evaluation by Students (Based on 1 = excellent to 5 = poor): 1.1.

Quantitative Ecological Toxicology. MS 640 (4 credits). (Spring Semester). College of William and Mary's Virginia Institute of Marine Science. Four graduate students. Sole Instructor.

2000 **Environmental Risk Assessment.** MS 641 (3 credits). (Fall Semester). College of William and Mary's Virginia Institute of Marine Science. Seven graduate students. Sole Instructor.

Practical Statistics for Environmental Measurement. Two day short course. College of William and Mary's Virginia Institute of Marine Science. Co-instructor with D.Ownby as primary instructor. Ten students. Course Instructor Evaluation of Newman (Based from 1 (not effective) to 10 (extremely effective)): 9.2.

Practical Statistics for Environmental Measurement. One day short course. Department of Environmental Protection, Richmond, Virginia. Taught twice to a total of 35 State of Virginia professionals.

- 1999 **Environmental Risk Assessment.** MS 641 (3 credits). (Fall Semester). College of William and Mary's Virginia Institute of Marine Science. Three graduate students. Sole Instructor.
- Practical Statistics for Environmental Measurement** (Summer). Two day short course. College of William and Mary's Virginia Institute of Marine Science. Co-instructor with D. Ownby as primary instructor. Fourteen students. Course Instructor Evaluation of Newman (Based from 1 (not effective) to 10 (extremely effective)): 9.1.
- Quantitative Ecological Toxicology.** (Summer). Five day short course. College of William and Mary's Virginia Institute of Marine Science. Fourteen students. Sole instructor. Course Instructor Evaluation of Newman (Based from 1 (not effective) to 10 (extremely effective)): 9.1.
- Quantitative Ecological Toxicology.** ECOL863-863L (4 credits). University of Georgia Interdisciplinary Toxicology Program. Nine graduate students. Visiting Lecturer/Adjunct Faculty, May Session, Sole Instructor.
- Advanced Ecological Risk Assessment.** MS 697 (1 credit). (First Summer Session 1999). College of William and Mary's Virginia Institute of Marine Science. Seven graduate students. Sole Instructor.
- The Practice of Structure Activity Relationships (SAR) in Toxicology.** Half day short course, Society of Toxicology Annual Meeting. Co-Instructor with six others.
- The Practice of Structure Activity Relationships (SAR) in Toxicology.** Half day short course, National Society of Toxicology and Chemistry Meetings, Co-Instructor with seven others.
- Quantitative Ecological Toxicology.** MS 640 (4 credits). (Spring Semester). College of William and Mary's Virginia Institute of Marine Science. Seven graduate students. Sole Instructor.
- Calculating and Understanding Risk from Chemicals Released to the Environment.** Five day short course, Risk Assessment Corporation RAC). Co-instructor with twelve others, San Antonio, TX.
- Environmental Risk Assessment.** MS 641 (3 credits). (Fall Semester). College of William and Mary's Virginia Institute of Marine Science. Seven graduate students. Sole Instructor.
- 1998 **Independent Study: Quantitative Ecotoxicology.** MS 697 (2 credits). (Summer Session 1). College of William and Mary's Virginia Institute of Marine Science. Three graduate students. Sole Instructor.
- Quantitative Ecological Toxicology.** (Summer). College of William and Mary's Virginia Institute of Marine Science. Sole instructor. Course Instructor Evaluation (Based from 1 (not effective) to 10 (extremely effective)): 9.0.
- Quantitative Ecological Toxicology.** University of Georgia. Sole Instructor. Course Instructor Evaluation (Based from 1 (not effective) to 10 (extremely effective)): 9.0.
- Quantitative Ecological Toxicology.** University of Joensuu (Finland). Sole instructor. Course Instructor Evaluation (Based from 1 (not effective) to 10

- (extremely effective)): 9.1.
- 1997 **Quantitative Ecological Toxicology**. Royal Holloway University of London. Sole Instructor. Course Instructor Evaluation (Based from 1 (not effective) to 10 (extremely effective)): 9.1.
- 1996 **Quantitative Ecological Toxicology**. ECOL/EHS 863/863L. (4 credits). (Winter Quarter). University of Georgia. Sole Instructor. Course Evaluation (Overall; Based from 1 (poor) to 5 (excellent)): 4.70.
- 1995-96 **Quantitative Methods in Ecotoxicology**, Five-day short course. University of Georgia. Sole Instructor. Course Instructor Evaluations (Based from 1 (not effective) to 10 (extremely effective)): 9.3 in 1995; 9.0 in 1996.
- 1994 **Statistical Methods and Software for Toxicological Data Analysis**. Half day short course, Society of Environmental Toxicology and Chemistry Annual Meeting. Co-Instructor.
- 1988-98 **Research Advisor**. Research projects of five graduate students (three M.S. and one Ph.D. completed, one Ph.D. finishing) and three postdoctoral fellows.
- 1983-97 **Advisor**. University of Georgia. Summer student research program. Independent research projects of thirteen undergraduate students.
- 1990 **Introduction to Ecology**. Biol. 350. University of Georgia--Athens. Department of Biology. Co-Instructor.
- 1984-88 **Man and The Environment**. Biol. 270. University of South Carolina--Aiken. Department of Biology. Co-Instructor.
- 1983 **Ecology and Man**. Biol. 20. University of California--San Diego, Department of Biology. Sole Instructor.
- 1978-80 **Pollution Microbiology Laboratory**. Teaching Assistant. Rutgers University, Department of Environmental Sciences. Sole Instructor.
- 1974-75 **Introductory Biology and Invertebrate Zoology**. Teaching Assistant. University of Connecticut, Department of Life Sciences.

STUDENTS MENTORED

Major Advisor

<u>Name</u>	<u>Degree</u>	<u>Degree Granting University²</u>
Stephen Diamond	MS	Miami University (Ohio)
Vincent Kramer	MS	University of Alabama
Michael Longhi	MS	Wake Forest University
Mary Gay Heagler	PhD	Rutgers University
Christopher Tataara	PhD	University of Georgia
Lee Ann Woodward	PhD	University of California - Davis
David Ownby	PhD	College of William and Mary
Kevin Groszkowski	MS	College of William and Mary
Zhao Yuan	PhD	College of William and Mary
John Carringer	PhD	College of William and Mary
Erica Holloman	PhD	College of William and Mary

Kyle Tom	MS	College of William and Mary
Xu Xiaoyu	PhD	College of William and Mary
Wang Jincheng	MS	College of William and Mary

²The Savannah River Ecology Laboratory has a well-funded graduate research program that allows students to come from any university to work on their degree research under the supervision of a SREL faculty member. Except for Longhi, all of these non-College of William & Mary students were mentored solely by M. Newman. Longhi was co-advised with another SREL faculty member.

Graduate Committee Member/External Examiner

<u>Name</u>	<u>Degree,Role</u>	<u>University</u>
Stephen Doggett	PhD,Committee Member	University of Georgia
Tod Morse	MS, Committee Member	University of Georgia
Heather Chapman	PhD, External Examiner	Griffith University (Queensland)
Kevin Kwok	PhD, External Examiner	University of Hong Kong
Sara Mirabilio	MS, Committee Member	College of William and Mary
Alex Jestel	MS, Committee Member	College of William and Mary
Christine Conrad	MS, Committee Member	College of William and Mary
Bruce Vogt	MS, Committee Member	College of William and Mary
Jun Young Kim	PhD, Committee Member	College of William and Mary
Shana Rapoport	MS, Committee Member	College of William and Mary
Taiping Wang	PhD, Committee Member	College of William and Mary
Tan Chew Khun	PhD, External Examiner	University of Western Australia
Man-Yu Yum	PhD, Committee Member	Iowa State University (Statistics)
Treda Smith	MS, Committee Member	College of William and Mary
Stefanie Gera	MS, Committee Member	College of William and Mary

Undergraduate Research Supervision

Since 1983, Dr. Newman directed summer research of thirteen undergraduate students. Those directed since 1990 are listed below. Five of the ten students listed produced a publication based on their summer research project. Eight went on to graduate school.

<u>Name</u>	<u>Undergraduate University</u>	<u>Summer</u>
M. Michelle Keklak	University of South Carolina - Aiken	1989-91
Stephen Diamond	University of Massachusetts	1989
Charles Lee	Duke University	1990, 1991
Michael Aplin	Pomona University	1991
Amy Faivre	Mount Holyoke College	1991
Carrie Thomas	University of Wisconsin - Madison	1993
Anne Osborn	Clemson University	1993
Christine Phelps	Eastern Michigan University	1994
Minghua Nie	University of Alabama	1996

Ashley Nance*	Hampton University	2006
Jochen Zubrod	University of Koblenz-Landau	2009
Frank Seitz	University of Koblenz-Landau	2009

2008/2009 One of 2 William & Mary faculty members who brought 6 (2008) and 5 (2009) undergraduate and graduate students to China on an international exchange grant (sGIG)

High School Senior Projects

<u>Name</u>	<u>School</u>	<u>Year</u>
Jennifer Scott**	Gloucester High School	2004/5
Sean Heatherman	Grafton High School	2004/5
Trevor Ottofaro	Governors School of Science & Technology	2008
Vi Nguyen***	Governors School of Science & Technology	2010

*Student project awarded honorary mention at NOAA-Education Partnership Program Conference (Washington, DC).

**Student project placed first in the environmental science category for the Virginia Academy of Science and won the Henry Mackenzie Scholarship (\$5000).

***Student project provided the basis for research of PhD student, Xu Xiaoyu, at VIMS.

High School Field Trips

Parent/Instructor in May 2005 New Horizons Governors School field trip to nature preserves in Costa Rica.

Postdoctoral/Visiting Faculty Supervision

<u>Name</u>	<u>Years in Training</u>	<u>Project</u>
Mary Gay Heagler	1991-1992	Allometry of metal bioaccumulation
Irvin R. Schultz	1993-1995	Metal toxicokinetics in fish
Eric L. Peters	1993-1995	Radionuclide toxicokinetics in fish
Xiong Li	2006-2007	Marine Ecotoxicology

REFEREED PUBLICATIONS

Key: A technician (*), graduate student (**), undergraduate student (***), or postdoctoral fellow (****) for whom M.C. Newman was acting as a mentor.

- 2012 **Newman, M.C.** and D.A. Evans. Ecotoxicology, in Encyclopedia of Environmetrics. H. El-Shaarawi and W.W. Piegorsch, eds. John Wiley & Sons, Chichester, UK. (Revision of 2002 entry)
- 2012 Wang, J.,** **M.C. Newman**, X. Xiaoyu, A. Condon, and L. Liang. Floodplain methylmercury biomagnification factor higher and more variable than that of the contiguous South River (Virginia USA). Ecotox. Env. Safety (In review)
- 2012 Wang, J.** and **M.C. Newman**. Mercury dietary exposure of three bird species nesting on a contaminated floodplain (South River, VA, USA). Integ. Environ.

- Assess. Manag. (In review).
- 2011 **Newman, M.C.** Ecotoxicology. Chapter in *The Principles of Toxicology. Environmental and Industrial Applications*, Eds., P.L. Williams, R.C. James, and S.M. Roberts, John Wiley & Sons, New York, NY. (In press).
- 2012 **Holloman, E.L. and **M.C. Newman**. Expanding perceptions of subsistence fish consumption: evidence of high commercial fish consumption and dietary mercury exposure in an urban coastal community. *Sci. Total Environ.* 416:111-120.
- 2011 ** Carriger, J.F. and **M.C. Newman**. Influence diagrams as decision-making tools for pesticide management. *Integ. Environ. Assess. Manag.* (Online 19 Oct 2011).
- 2011 **Newman, M.C.**, X. Xu, A. Condon, and L. Liang. Floodplain methylmercury biomagnification factor higher than that of the contiguous river (South River, Virginia, USA). *Environ. Pollut.* 159: 2840-2844.
- 2011 **Newman, M.C.** Chapter 1. When scientific vantage is not enough. In: *Mercury Pollution. From Science to Humanities*. S. Zuber and M.C. Newman (Eds.), Taylor & Francis, Boca Raton, FL.
- 2011 **Newman, M.C.** and K.M.Y. Leung. Chapter 7. Mercury by the numbers. In: *Mercury Pollution. From Science to Humanities*. S. Zuber and M.C. Newman (Eds.), Taylor & Francis, Boca Raton, FL.
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- 2010 Evans, D.A., **M.C. Newman**, M. Lavine, J.S. Jaworska, J. Toll, B. Brooks, and T.C.M. Brook. Chapter 5. The Bayesian vantage for dealing with uncertainty. In: W.J. Warren-Hicks and A. Hart (Eds.) *Application of Uncertainty Analysis to Ecological Risks of Pesticides*. SETAC Press, Pensacola, FL.
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- 1989 **Newman, M.C.** and D.K. Doubet. Size dependence of mercury (II) accumulation kinetics in the mosquitofish, *Gambusia affinis* (Baird and Girard). *Arch. Environ. Contam. Toxicol.* 18:819-825.
- 1989 ***Mitz, S.V.** and M.C. Newman. Allometric relationship between oxygen consumption and body weight of mosquitofish, *Gambusia affinis*. *Environ. Biol. Fishes* 24:267-273.
- 1989 **Diamond, S.A., **M.C. Newman**, M.E. Mulvey, D. Martinson and P.M. Dixon. Allozyme genotype and time to death of mosquitofish, *Gambusia affinis* (Baird and Girard), during acute exposure to inorganic mercury. *Environ. Toxicol. Chem.* 8:613-622.
- 1989 **Newman, M.C.**, S.A. Diamond. M.E. Mulvey and P.M. Dixon. Allozyme genotype and time to death of mosquitofish, *Gambusia affinis* (Baird and Girard),

- during acute toxicant exposure: A comparison of arsenate and inorganic mercury. *Aquatic Toxicol.* 15:141-159.
- 1989 **Newman, M.C.** and A.W. McIntosh. Appropriateness of aufwuchs as a monitor of bioaccumulation. *Environ. Pollut.* 60:83-100.
- 1989 **Newman, M.C.**, P.M. Dixon, B.B. Looney, and J.E. Pinder, III. Estimating mean and variance of environmental samples with below detection limit observations. *Water Resources Bull.* 25:905-916.
- 1988 **Newman, M.C.** and S.V. Mitz. Size dependence of zinc elimination and uptake from water by mosquitofish, *Gambusia affinis* (Baird and Girard). *Aquatic Toxicol.* 12:17-32.
- 1988 **Newman, M.C.** Heavy metal speciation in Coastal Plains watersheds of the southeastern United States: Temporal and spatial variation. Proceedings of the International Conference on Contaminants in the Environment (Lisbon, Portugal).
- 1988 Mulvey, M., **M.C. Newman** and D.S. Woodruff. Genetic differentiation among West Indian populations of the schistosome-transmitting snail, *Biomphalaria glabrata*. *Malacologia* 29:309-317.
- 1986 **Newman, M.C.** The Comprehensive Cooling Water Report. Volume 2. Water Quality. SREL UC28-2, 600 pp.
- 1985 **Newman, M.C.**, J.J. Alberts and V.A. Greenhut. Geochemical factors complicating the use of aufwuchs to monitor bioaccumulation of arsenic, cadmium, chromium, copper and zinc. *Water Res.* 19:1157-1165.
- 1985 Alberts, J.J., **M.C. Newman** and D.W. Evans. Seasonal variations of trace elements in dissolved and suspended loads for coal ash ponds and pond effluent. *Water, Air and Soil Pollut.* 26:111-128.
- 1983 **Newman, M.C.**, A.W. McIntosh and V.A. Greenhut. Geochemical factors complicating the use of aufwuchs as a biomonitor for lead levels in two New Jersey reservoirs. *Water Res.* 17:625-630.
- 1983 **Newman, M.C.** and A.W. McIntosh. Lead elimination and size effects on accumulation by two freshwater gastropods. *Arch. Environ. Contam. Toxicol.* 12:25-29.
- 1983 **Newman, M.C.** and A.W. McIntosh. Slow accumulation of lead from contaminated food sources by the freshwater gastropods, *Physa integra* and *Campeloma decisum*. *Arch. Environ. Contam. Toxicol.* 12:685-692.
- 1982 **Newman, M.C.** Aspects of the behavior of lead in a reservoir: The effect of habitat contamination on lead concentrations in benthic invertebrates. Proceedings of the Surface Water Contamination Conference, Ramapo College, NJ.
- 1982 **Newman, M.C.** and S.Y. Feng. Susceptibility and resistance of the rock crab, *Cancer irroratus* to natural and experimental infection. *J. Invert. Pathol.* 40:75-88.
- 1982 **Newman, M.C.** and A.W. McIntosh. The influence of lead in components of a freshwater ecosystem on molluscan tissue lead concentrations. *Aquatic Toxicol.* 2:1-19.

BOOKS WRITTEN

- 2010 ¹**Newman, M.C.** *Fundamentals of Ecotoxicology*, Third Edition. Taylor & Francis/CRC Press, Boca Raton, FL. (2010 imprint)
- 2008 ²**Newman, M.C.** and W.H. Clements. *Ecotoxicology, A Comprehensive Treatment*, Taylor & Francis/CRC, Boca Raton, FL, p. 852.
- 2007 **Newman, M.C.** and M.A. Unger with contributions and translation by Yuan Zhao and Taiping Wang. *Fundamentals of Ecotoxicology*. Second Edition, Taylor & Francis/CRC, Boca Raton, FL, Chinese translation released by Chemical Industrial Press, Beijing, China.
- 2002 Clements, W. and **M.C. Newman**. *Community Ecotoxicology*. John Wiley & Sons, Chichester, UK, p. 336.

¹ J.T. Oris (Miami University, OH) reviewed this edition for *Integ. Env. Assess. Manag.* (2010), stating "... the 3rd edition of *Fundamentals of Ecotoxicology* continues to improve on an outstanding book ...one of the best works available in ecotoxicology...fills a needed niche in ecotoxicology and will remain a staple on my bookshelf and in my classroom ... a work that Newman should count with pride."

² A.R. Flegal (Univ.CA-Santa Cruz) reviewed this book for *Limn. Oceanogr. Bull.* (17(2): 2008), concluding "...I now find myself at awe of the breadth and depth of the new book by Newman and Clements (2008)...The book is simply the best that I have encountered...In summary, it is – in my opinion – the definitive book to date on the complex and emerging science of ecotoxicology." G. Suter (EPA) reviewed this book for *IEAM* (4(4), 2008), opining, "If you want to explore ecotoxicological issues, paradigms, and concepts yourself or with your students, this is the text for you." Reviewing for the *J. Hazard. Materials* (160:688, 2008), G.F. Bennett (Univ. Toledo) concludes, "I have only scratched the surface of this impressive book but suffice it to say, it is well written and to the extent I can evaluate its content is exceedingly well done." For *Intern. J. Environ., Anal. Chem.*, (2008, Vol. 88(5)), J. Albaiges (CID-CSIC, Barcelona, Spain) summarized, "... highly informative, rich in details that are integrated as much as currently possible in the new science of ecotoxicology and, in summary, very pleasant to read. A milestone in the field ..."

- 2003 ³**Newman, M.C.** and M.A. Unger. Second edition of *Fundamentals of Ecotoxicology*. CRC/Lewis, Boca Raton, FL, p. 458. (3,616 copies sold as of August 25, 2009)
- 2001 ⁴**Newman, M.C.** *Population Ecotoxicology*. John Wiley & Sons, Chichester, UK, p. 228.
- 1998 **Newman, M.C.** *Fundamentals of Ecotoxicology*. Ann Arbor Press, Chelsea, MI, p. 402.
- 1995 ⁵**Newman, M.C.** *Quantitative Methods in Aquatic Ecotoxicology*. CRC/Lewis Publishers, Boca Raton, FL, p.426. (1,178 copies sold as of August 25, 2009).

BOOKS CURRENTLY BEING WRITTEN/TRANSLATED

- 2011 Walker, J., M. Enache and **M.C. Newman**. *Predicting Biological Activities of Metal Ions*. Taylor & Francis/CRC, Boca Raton, FL.
- 2012 M.C. Newman. *Quantitative Ecotoxicology, 2nd Edition*. Taylor & Francis, Boca Raton, FL.
- 2012 **Newman, M.C.** *Fundamentals of Ecotoxicology*, Third Edition. Turkish translation under contract for release February 2012. Palme Publishing Co., Ltd., Ankara, Turkey.

BOOKS EDITED/TRANSLATED

- 2011 **Newman, M.C.**, M. Roberts and R. Hale. *Coastal and Estuarine Risk Assessment*. Mandarin translation by Chinese Research Academy of Environmental Sciences (Dr. Zongyan Yang) . China Ocean Science (Beijing)
- 2011 S. Zuber and **M.C. Newman**. *Mercury Pollution. A Transdisciplinary Vantage*, Taylor & Francis, Boca Raton, FL.
- 2002 Crane, M., **M.C. Newman**, P. Chapman and J. Fenlon. *Risk Assessment with Time-to-Event Models*. CRC Press LLC, Boca Raton, FL, p. 175.
- 2002 **Newman, M.C.**, M. Roberts and R. Hale. *Coastal and Estuarine Risk Assessment*. CRC Press LLC, Boca Raton, FL, p. 347.

³ Reviews of the two editions of this book have been very positive. In a SETAC Globe book review, Dr. G. Rand states that the first edition was “an organized and highly readable text ... fills an important void ... the only published book to-date that is oriented for use as a basic introductory text ... Overall this book will be of value to beginning students and to research investigators as a reference tool.” Van Straalen (ES&T, Sept. 2003, page 326A), refers to the second edition as “the most comprehensive textbook available to date ...”

⁴ In a SETAC Globe book review, G. Suter commented about this book, “...like his earlier volumes, Newman’s latest is distinct in tone and content. A good scientific colleague is someone who stretches your perspective by asking and answering questions that you would not ask yourself. Through his many books and papers, Mike Newman has been a very good colleague to me and many other ecotoxicologists and risk assessors.” In a review for the journal, *Water and Environment Journal* (2002, Vol. 16(2)), J. Hawkins comments that the book is “packed with theoretical ideas.”

⁵ Reviewing this book for *Trans. Am. Fish. Soc.*, Clements stated that “...Newman’s book is a refreshing and highly readable treatment of quantitative aspects of ecotoxicology ... Overall, this book will be of tremendous value ...” Dr. G. Suter begins his review column for the SETAC Globe, “Gary Rand reviews [here] Mike Newman’s excellent text on quantitative ecotoxicology. I would like to add the observation that Mike has produced a *rara avis*, a single-authored book ... He is to be commended for mastering this field and presenting it in a more coherent manner than is achieved by edited compilations.”

- 1998 **Newman, M.C.** and C. Strojan. *Risk Assessment: Logic and Measurement*. CRC Press LLC, Boca Raton, FL, p. 352.
- 1996 **Newman, M.C.** and C. Jagoe. *Ecotoxicology: A Hierarchical Treatment*. CRC Press LLC, Boca Raton, FL, p.411.
- 1991 **Newman, M.C.** and A.W. McIntosh. *Metal Ecotoxicology: Concepts and Applications*. Lewis Publishers, Chelsea, MI, p. 399.

FELLOWSHIPS AND GRANTS

In addition to the funding described below, EPA, College of William and Mary Reeves Center, UGA Research Foundation, National Society of Environmental Toxicology and Chemistry, International Society of Environmental Toxicology and Chemistry, Society of Environmental Toxicology and Chemistry - Europe (UK), University of Georgia=s Interdisciplinary toxicology program, the University of London - Royal Holloway, Australian Society of Ecotoxicology, and John Wiley & Sons have awarded funds for foreign travel to Dr. Newman. Numerous private consulting contracts to M.C. Newman are not listed.

Year	Proposal Title	Funded by	Amount
2011	Risk assessment of mercury in lower Chesapeake Bay seafood	Sea Grant	\$ 38,500
2010	Stable isotope-based trophic mixture models	URS	\$ 6,000
2010	Mercury terrestrial biomagnification	DuPont	\$210,000
2009	Mercury terrestrial biomagnification	DuPont	\$147,000
2008	Mercury biomagnification in the South River	DuPont	\$138,000
2008	Mercury trophic transfer in the Holston River	FWS	\$ 16,000
2007	Mercury: Hazard without Borders (S-GIG)	W&M College	\$ 50,000
2007	Mercury biomagnification models for the South River	DuPont	\$118,000
2007	Mercury bioaccumulation in periphyton of the Holston River	FWS/Olin	\$35,000
2007	Statistical/Risk assessment consulting to FWS	FWS	\$14,000
2005-06.1	Mercury biomagnification models for the South River: Aquatic and Floodplain	DuPont	\$34,900
	Probabilistic ecorisk assessment for fish, Mammals, and birds at the Great Dismal Swamp National Wildlife Refuge	FWS	\$21,200
	Statistical design and review of mercury Bioaccumulation data for the North Holston River	FWS	\$10,000
2005	Periphyton of the South River watershed, Virginia: Mercury accumulation, bioavailability And transformation	DuPont	\$29,314
2005-07	Survival time models quantitatively predict lethal effects of pulsed and different duration exposures to water-accommodated fractions of spilt oil	NOAA/CRRC	\$220,000
2002-04	Acceptability of pesticide effects on non-target species	UK DEFRA	£143,750 Newman: £30,000)
2002-2005	Statistical review of fish and wildlife assessment documents concerning mercury impacts	US FWS	\$7,500/year
2002-07	Establishment of a Mid-Atlantic COSEE	NSF	\$2,500,000

			(Newman: \$625,000)
2001-02	Virginia Space Grant Consortium VAccess	NASA	\$60,000
2001-03	Science Advisory Panel Consultant	DuPont	\$ 70/hr
2000	Bell Atlantic Distance Learning Grant (with Christopher Newport University consortium)	Bell Atlantic	\$145,500
2000-03	Research Experience for Undergraduates	NSF	\$177,210
1999-00	US DOE Contract, Science and Technology Needs for DOE Hanford Site ecological risk assessment activities	US DOE	\$20,000
1998	UK Direct Toxicity Assessment (DTA) Demonstration Programme: Phase II - Implementation of the Esk Project Plan	UKWIR	£50/hr
1998-01	Are genetic diversity and genetic differentiation bioindicators of contaminant impact on natural populations?	EPA STAR	\$727,255
1998-01	Fate and effects of crop protectants from tomato cultivation on living resources in tidal creeks.	VDACS	\$196,092
1998-99	A stochastic assessment of metal exposure to bald eagles consuming fish and waterfowl from a reactor cooling reservoir.	UGA/SREL	\$24,000
1998-02	Risk based approaches to the derivation and expression of environmental quality standards.	NERC (UK)	£125,237
1998	Contract to develop two documents, <i>Estimation of the percent level associated with the NOEC from conventional ecotoxicity tests</i> , and <i>A layman's guide to regression</i> .	OECD	\$4,000
1998	Scientific peer review of the EPA Region 2/CENAN framework for evaluating dredged material for proposed placement at the HARS.	EPA Region 2	\$2,400
1998	Short course, Quantitative Ecotoxicology, taught at the Virginia Institute of Marine Science and Savannah River Ecology Laboratory.	VIMS/UGA	\$9,000
1996-98	SREL Ecotoxicology and Ecological Risk Assessment Program (EERAP).	USDOE-SRO	\$515,000/yr
1995	QSAR-like models of mono-, di- and trivalent metal toxicity based on ion qualities: <i>Caenorhabditis elegans</i> assay	UGA Fac. Res. Grant	\$7,600
1991-94	Mercury accumulation in mosquitofish	USDOE-SRO	\$75,000/yr
1990	Population structure and adaptation by <i>Helix aspersa</i> to lead contamination	NATO	BF124,000
1988	Heavy metal accumulation in crocodile eggs	Un. of Florida	\$2,000
1988-94	Toxicokinetics of inorganic pollutants	SDOE-SRO	\$250,000/yr
1987	Toxicokinetics of mercury in mosquitofish	USDOE-SRO	\$100,000
1987-88	Benthic nutrient flux in a reactor cooling lake	USDOE-SRO	\$50,000/yr
1986-89	Nutrient, light and temperature effects on autotrophic nutrient removal and algal growth in a cooling reservoir	USDOE-SRO	\$150,000/yr \$ 75,000 (89)
1984-85	Comprehensive study of effects of thermal effluent discharge from DOE nuclear pro-	USDOE-SRO	\$375,000/yr

1984	duction reactors on receiving water quality GPP proposal for ultraclean laboratory complex and laboratory addition	USDOE-GPP \$1,030,000
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INVITED SCHOLARLY PAPERS AND TALKS

2011 Invited Speaker, Huazhong Normal University. Wuhan, P.R. China – May
 Invited Speaker, Hubei University of Education. Wuhan, P.R. China - May
 Invited Speaker. India Erudite Program – March 2011 at the Cochin
 University of Science and Technology, School of Marine Sciences, Cochin,
 Kerala, India; Also University of Kerala, Trivandrum. Four invited talks.

2010 Keynote speaker, EPPH Conference – June 2010, Chengdu, China
 Keynote speaker, SETAC EU Conference – May 2010, Seville, Spain
 Lecturer (2 classes), Central China Normal University, Wuhan, China
 Invited Talk, SETAC Asia/Pacific Conference - June 2010, Guangzhou, China

2009 Invited instructor, Preparing Excellent Publications, Young Environmental
 Scientists (YES) Meeting – March 2009 at Universitat Koblenz-Landau
 (Germany)

2008 South China Institute of Environmental Sciences, Guangzhou
 Central China Normal University, Wuhan
 Jinan University, Guangzhou
 Virginia DEQ Biosolids Committee, Charlottesville, VA.

2007 Virginia DEQ Mercury Conference, Newport News, VA (Two Talks)
 Guangzhou Institute of Geochemistry, Chinese Academy of Sciences
 Fifth International Conference on Marine Pollution and Ecotoxicology, City
 University of Hong Kong (keynote)

2005 Toxicology and Risk Assessment Conference, Fairborn, OH
 ESA National Meeting, Montreal, Canada

2004 Texas Tech University (The Inst. Environ. & Human Health)
 UNESCO Lagoons and Coastal Wetlands in the Global Context. (keynote)
 Venice, Italy

2003 *Physiology, Toxicology, and Water Quality - Tallinn, Estonia*
 SETAC National Meeting (Meeting Opening Session)
 SETAC Mercury Indicators Workshop (Two Presentations)

2002 SETAC International Ecotoxicogenomics Workshop
 QSAR 2002 Workshop (keynote) – Ottawa, Canada
 Interact 2002 (keynote) – Sydney, Australia

2001 SETAC Annual Meeting
 College of Charleston
 Duke University
 Florida Atlantic University

2000 Delaware-Hudson Chapter of SETAC

1999 DuPont Haskell Laboratory
 US DOE Hanford Complex - Battelle PNNL Laboratory (Two Presentations)
 University of Maryland - Baltimore (Dept. of Biol. Sci.)

Society of Toxicology Annual Meeting
 Risk Assessment Corporation Short Course
 International Symposium on Pollutant Responses in Marine Organisms (PRIMO)
 Meetings (Two Presentations)

1998 SETAC-Europe (UK) Spring Meeting, Improving risk assessment with time-to-event methods (Two Presentations)
 SETAC-Europe (UK) 9th Annual Meeting, Forecasting the Environmental Fate and Effects of Toxic Chemicals

1997 University of London - Royal Holloway
 Current Issues on Chemical Mixtures, Colorado State University
 EPA ECOFRAM Group, Washington, DC

1996 Muhlenberg College
 University of New Haven
 Chesapeake Biological Laboratory
 National Society of Environmental Toxicology and Chemistry Annual Meeting
 Savannah River Environmental Sciences Workshop

1995 Georgia Institute of Technology
 Christopher Newport University
 University of London - Royal Holloway
 University of Reading (UK)
 Second International SETAC Congress (Vancouver, B.C.)

1994 U.S./Israeli Workshop on Water Quality Modeling and Monitoring (Haifa, Israel)

1992 U.S. EPA - Duluth
 Clemson University - TIWET
 SETAC 10th Pellston Conference
 National Society of Environmental Toxicology and Chemistry Annual Meeting

1991 Joint seminar, Creighton University and University of Nebraska, Omaha
 University of Nebraska, Lincoln
 Memphis State University
 Southwestern Louisiana University
 East Tennessee State University
 National Society of Environmental Toxicology and Chemistry Annual Meeting
 (Two Presentations)

1990 Lenoir-Rhyne College

1989 Tennessee Technical University
 Tulane University
 University of California--Davis
 Western Washington University

1988 Rutgers University (Seminar and Lecture)
 Voorhees College (Two Presentations)
 South Carolina Laboratory Management Society Annual Meeting (Three Presentations)
 DuPont Savannah River Laboratory (Two Presentations)

1987 Virginia Polytechnic Institute and State University
 National Society of Environmental Toxicology and Chemistry Annual Meeting

CONTRIBUTED SCHOLARLY PAPERS AND TALKS

- 2009 The 9th International Conference on Mercury as a Global Pollutant. Guiyang, China (1 Talk).
- 2008 SETAC National Meeting (Tampa, FL)(Three presentations)
- 2007 SETAC National Meeting (Milwaukee, WI)(Two presentations)
- 2006 SETAC Europe, The Hague, The Netherlands (Two presentations)
SETAC National Meeting (Quebec)(Two presentations)
- 2005 SETAC Europe, Lille, France
- 2004 SETAC National Meeting
ASLO (co-author) Savannah, GA
American College of Clinical Pharmacology
- 2003 SETAC National Meeting
Ocean Research Integrated Observatory Networks Meeting (San Juan, PR)
- 2002 SETAC National Meeting (Two presentations)
- 2001 SETAC National Meeting (Two presentations)
International Society of Environmental Toxicology and Chemistry Meeting in Madrid, Spain.
- 2000 National Society of Environmental Toxicology and Chemistry Annual Meeting (Five Presentations)
EPA STAR Annual Meeting
Society of Environmental Toxicology and Chemistry International Congress (Two Presentations)
- 1999 National Society of Environmental Toxicology and Chemistry Annual Meeting (Three Presentations)
- 1998 ASTM 8th Symposium on Environmental Toxicology and Risk Assessment
SETAC-Europe 8th Annual Meeting (Two Presentations)
National Society of Environmental Toxicology and Chemistry Annual Meeting (Two Presentations)
- 1997 National Society of Environmental Toxicology and Chemistry (Four Presentations)
SETAC-Europe 7th Annual Meeting, Amsterdam, The Netherlands
- 1996 National Society of Environmental Toxicology and Chemistry (Two Presentations)
American Malacology Union
ASTM Meetings
- 1995 Second International SETAC Congress (Four Presentations)
- 1994 Savannah River Environmental Sciences Workshop (Two Presentations)
Evolution Society Annual Meetings
Carolinas SETAC Annual Meeting
National Society of Environmental Toxicology and Chemistry (Three Presentations)
- 1993 First International SETAC Congress (Lisbon, Portugal, Two Presentations)

National Society of Environmental Toxicology and Chemistry (Four Presentations)
 1992 Carolinas SETAC Annual Meeting
 National Society of Environmental Toxicology and Chemistry (Four Presentations)
 1991 National Society of Environmental Toxicology and Chemistry (Two Presentations)
 1990 National Society of Environmental Toxicology and Chemistry (Five Presentations)
 NSF Population Biology Meetings (PBONE and SEEG)
 International Metals Conference (Four Presentations)
 1989 Institute of Ecology--University of Georgia
 American Society of Limnology and Oceanography (Two Presentations)
 South Carolina Laboratory Management Society (Two Presentations)
 National Society of Environmental Toxicology and Chemistry (Two Presentations)
 1988 Evolution Society Annual Meetings
 American Society of Limnology and Oceanography (Two Presentations)
 International Conference on Contaminants in the Environment
 Savannah River Ecology Laboratory
 1987 American Chemical Society Metal Speciation Workshop--Jekyll Island Annual Meeting
 American Society of Limnology and Oceanography (Two Presentations)
 National Society of Environmental Toxicology and Chemistry Annual Meeting
 1986 International Malacological Congress (Edinburgh, U.K.)
 American Chemical Society
 Regional Society of Environmental Toxicology and Chemistry
 National Society of Environmental Toxicology and Chemistry
 South Carolina Laboratory Management Society Annual Conference
 American Water Works Association Water Quality Technology Conference
 Southeastern Workshop on Ecological Effects of Power Generation
 1985 Department of Energy, Savannah River Plant
 American Society of Limnology and Oceanography
 National Society of Environmental Toxicology and Chemistry
 1984 Department of Energy, Savannah River Plant
 1983 American Society of Limnology and Oceanography
 University of Georgia, Savannah River Ecology Laboratory
 1982 New Jersey Academy of Sciences Annual Meetings
 American Society of Limnology and Oceanography
 1981 University of Georgia, Savannah River Ecology Laboratory
 New Jersey Academy of Sciences Annual Meetings
 Shellfish Association Annual Meeting
 American Malacological Union
 American Association for the Advancement of Science Winter Meetings

- 1980 Water Conference Proceedings, Ramapo College
1977 University of Delaware, College of Marine Studies

PUBLISHED PHOTOGRAPHY

- 2012 S. Zuber and M.C. Newman (Eds.), *Mercury Pollution. From Science to Humanities*. Taylor & Francis, Boca Raton, FL. Two B&W photographs.
- 2010 *Unbearable Beauty. Triumph of the Human Spirit. Photographs by W. Eugene Smith and Aileen M. Smith*, Catalogue for the exhibition by the same name held at the Muscarelle Museum of Art at The College of William & Mary in Virginia, 24 April–20 June, 2010. B&W photograph of the Cape du Couedic Lighthouse, Kangaroo Island, Australia.
- 2009 Newman, M.C. *Fundamentals of Ecotoxicology. Third Edition*. Numerous B&W and color photographs including book cover photographs.
- 2002/7 Newman, M.C. and Unger, M., *Fundamentals of Ecotoxicology*. CRC/Lewis LLC. Figures 8.2, 12.1, and 12.2, including Chinese addition.
- 2000 Newman, M.C. *Population Ecotoxicology*. John Wiley and Sons, London, Cover photograph.
- 1998 Newman, M.C. *Fundamentals of Ecotoxicology*. CRC/Lewis LLC. Figures 8.2, 12.1, and 12.2
- 1997 Meffe, G.K. and C.R. Carroll. *Principles of Conservation Biology*. Sinauer Associates, Inc., Sunderland, MA. Figure 1.6d.
- 1997 Beeby, A. and A.-M. Brennan. *First Ecology*. Chapman & Hall, London. Plates 1 and 12.

SOFTWARE

- 2003 **vUNCENSOR 5.1**. Window-based and expanded version of the UNCENSOR program described below.
- 1996 **RENOEC**. Developed by M.C. Newman and R. Jagoe. This program implements a resampling method for estimating community-level NOEC or NEC values.
- 1996 **SAMPSIZE**. Developed by R. Jagoe and M.C. Newman. This program calculates the minimum number of samples or replicates necessary to obtain a desired level of statistical confidence.
- 1990-95 **UNCENSOR V 2.0/3.0/4.0**, 1990/92/95. Developed under the joint direction of M.C. Newman and P.M. Dixon. The program implements a variety of statistical methods of handling analytical data sets with "below detection limit" observations.
- 1995 **STRESS. V 1.0**. Developed by M.C. Newman, D. Morgan, and R. Jagoe. This program simulates demographic and genetic changes in populations exposed acutely and/or chronically to toxicants. It is an individual-based model capable of simulating selection including viability, sexual, fecundity, and gametic selection, and meiotic drive.