February 10, 2019

Marie A. Vitulli
Curriculum Vita

Current Address

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Citizenship United States

Education

B.A.	University of Rochester, Rochester, NY. B.A. in Mathematics with Highest Distinction, 1971.
M.A.	University of Pennsylvania, Philadelphia, PA. M.A. in Mathematics, 1973
Ph.D.	University of Pennsylvania, Philadelphia, PA. Ph.D. in Mathematics, 1976

Faculty Appointments

1976-1982	Assistant Professor of Mathematics, University of Oregon, Eugene, OR.
1982-1991	Associate Professor of Mathematics, University of Oregon, Eugene, OR.
1991-2011	Professor of Mathematics, University of Oregon, Eugene, OR.
2011-present	Professor Emerita of Mathematics, University of Oregon, Eugene, OR

Academic Awards and Honors

1969	Stoddard Prize in Mathematics, University of Rochester
1970	Phi Beta Kappa (elected junior year at University of Rochester as one of seven)
1972,1973	National Science Foundation Traineeship, University of Pennsylvania
1975	Dissertation Year Fellowship, University of Pennsylvania
1977,1979, 1990	Faculty Summer Research Awards, University of Oregon
2004	"Innovative Use of Peer Instruction & Wireless Transmitters for Mathematics"; $5000 grant funded by NEA (co-PI with Jill Baxter)
2005 - 2007	"The Business of Teaching Business Calculus: A Problem-Driven Approach"; $54,500 grant funded by UO Educational Technology Fund
2014	AWM-MAA Etta Z. Falconer Lecturer
2017	AWM Service Award
2019	2019 Class of AWM Fellows

Research Publications

Weierstrass points and monomial curves, J. of Alg., 48 (1977), 454-476. (with D.S. Rim)

The obstruction of the formal moduli space in the negatively-graded case, Pacific J. Math., 82 (1979), 281-288.

Complete intersections in C^n and R^{2n}, Proc. of the A.M.S., 78 (1980), 331-336.

Seminormal rings and weakly normal varieties, Nagoya Math. J., 82 (1981), 27-56. (with J.V. Leahy).

Weakly normal varieties: the multicross singularity and some vanishing theorems on local cohomology, Nagoya Math. J., 83 (1981), 137-152. (with J.V. Leahy).

On grade and formal connectivity for weakly normal varieties, J. of Alg., 80 (1983), 23-28.

The hyperplane sections of weakly normal varieties, Amer. J. Math., 105 (1983), 1357-1368.

Seminormal graded rings and weakly normal projective varieties, Internat. J. of Math. and Math. Sci., 8 (1985), 231-240. (with J. V. Leahy).

Corrections to "Seminormal rings and weakly normal varieties", Nagoya Math. J., 107 (1987), 147-157.

Homeomorphism versus isomorphism for varieties, J. Pure and Appl. Algebra, 56 (1989), 313-318.

V-Valuations of a commutative ring I., J. of Alg., 126 (1989), 264-292 (with D.K. Harrison).

Complex-Valued places and CMC subsets of a field, Comm. in Alg. 17 (1989), 2529-2538 (with D.K. Harrison).

A Categorical approach to the theory of equations, J. Pure and Appl. Algebra 67 (1991), 15-31(with D.K. Harrison).

Complex-valued preplaces and the nonring CMC subsets of a ring, Comm. in Alg. 18 (1990), 3743-3757 (with K.G. Valente).

Orderings and prime-like subsets of a ring, J. of Pure and Applied Alg. 81 (1992), 197-218 (with K.G. Valente).

Prime-like subsets of a commutative ring, in "p-Adic Methods in Number Theory And Algebraic Geometry", Contemporary Mathematics Vol. 133 (1992), 211-220.

The weak subintegral closure of an ideal, J. of Pure and Applied Alg. 141 (1999) 185-200 (with J.V. Leahy).

The weak subintegral closure of a monomial ideal, Comm. in Alg. 27(11) (1999). 5649-5667 (with L. Reid).

Weak normalization and weak subintegral closure, in "Singularities in Algebraic and Analytic Geometry", C.G. Melles and R.I. Michler, Ed., Contemporary Mathematics Vol. 266 (2000), 11 - 22.

Some results on normal homogeneous ideals, Comm. in Alg. 31(11) (2003), 4485-4506. (with L. Reid and L. G. Roberts).

Some normal monomial ideals, "Topics in Algebraic and Noncommutative Geometry," C.G. Melles, J-P Brasselet, G. Kennedy, K. Lauter, L. McEwan, Eds., Contemporary Mathematics Vol. 324 (2003), 205 - 218

The core of monomial ideals, Advances in Math. 211(1) (2007) 72 – 93. (with C. Polini and B. Ulrich).

Serre's condition R_k for affine semigroup rings, Comm. in Alg. 37(3) (2009), 743 – 746.

Weak subintegral closure of ideals, Advances in Math. 226(3) (2011) 2089 –2117. (with T. Gaffney). ArXiv:0708.3105 http://front.math.ucdavis.edu/0708.3105

Weak normality and seminormality, "Commutative algebra: Noetherian and Non-Noetherian Perspectives," M. Fontana, S.-E. Kabbaj, B. Olberding, I. Swanson, Eds., Springer Verlag (2011) 441 – 480. ArXiv:0906.3334 http://front.math.ucdavis.edu/0906.3334

Other Publications

An Update: Are women getting all the jobs?, Notices of Amer. Math. Society, 57 (2010) 984 – 986 (with Mary E. Flahive).

Are women getting all the jobs?, Notices of the Amer. Math. Society 44(1997), 338-339 (with Mary E. Flahive).

"Round Table Report: Women in Mathematics in the United States" in European Congress of Mathematics, Budapest, July 22-26, 1996, Progress in Mathematics Vol. 169 (1998) Birkhaüser (with Sylvia M. Wiegand).

Critique to "Understanding currents causes of women's underrepresentation in science" by Ceci and Williams, PNAS (February 7, 2011) https://sites.google.com/site/awmmath/awm-resources/policy-and-advocacy/critique-of-understanding-current-causes-of-women-s-underrepresentation-in-science
(with Cathy Kessel)

AWM Statement in response to the PCAST Report "Engage to Excel" released in February 2012 https://docs.google.com/file/d/0B2rXxbFqvn3ZSkZuRzI4SElDc1E/edit?pli=1

AWM 2013 Statement on Non-Discrimination at AWM Activities https://sites.google.com/site/awmmath/awm-resources/policy-and-advocacy/harassment-statement

"Writing Women in Mathematics into Wikipedia," Association for Women in Mathematics Newsletter, Vol 43. No. 3, May-June 2014, 17 – 18.

"An Interview with Marie Vitulli, Part 1," Girls' Angle Bulletin, Vol. 7 No. 4, April 2014, 3 – 5.

"An Interview with Marie Vitulli, Part 2," Girls' Angle Bulletin, Vol. 7 No. 5, May 2014.

"Gender Differences in First Jobs for New US PhDs in the Mathematical Sciences," Notices of the Amer. Math. Soc. **65** no. 3, 326-329. (full study at arXiv:1710.11256)

"Writing Women in Mathematics into Wikipedia," Notices of the Amer. Math. Soc. **65** no. 3, 330-334. (full article at arXiv:1710.11103)

Miscellaneous

I created and continue to maintain the Women in Math Web site (http://www.uoregon.edu/~wmnmath). It is the most complete Web site for women in the mathematical sciences on the Web. My site features an extensive collection of biographies; a categorized and searchable bibliography of publications on gender and mathematics and gender and science; a section on opportunities including information on grants, scholarships, fellowships, and summer intern programs; a section on associations of interest to women in the mathematical sciences; and a section containing miscellaneous links. The site was chosen as Site of the Day for 4 August 1998 by New Scientist Planet Science and by the Eisenhower National Clearinghouse for Mathematics and Science Education as one of its Digital Dozen sites.

Selected Invited Talks

Oregon State University, Corvallis, Oregon. Colloquium lecture, 1976. "Weierstrass Points and Monomial Curves."

Pacific Northwest Geometry Seminar, University of Oregon, Eugene, Oregon, 1977. "The Smoothing of Monomial Curves."

Eighty-sixth Annual Meeting of the American Mathematical Society, Special Session on Commutative Rings and Algebraic Geometry, San Antonio, Texas, 1980. "Weakly Normal Varieties and the Multicross."

Pacific Northwest Geometry Seminar, University of Utah, Salt Lake City, Utah, 1983. "Seminormal Rings and Weakly Normal Varieties."

University of Oregon, Eugene, Oregon, Colloquium lecture, 1985. "Seminormality: A General Survey."

837th Meeting of the American Mathematical Society, Special Session on Commutative Rings and Algebraic Geometry, Lincoln, Nebraska, 1987. "Valuation Theory for Commutative Rings."

Purdue University, West Lafayette, Indiana, Purdue Commutative Algebra Seminar, 1988. "Valuation Theories for Commutative Rings."

852nd Meeting of the American Mathematical Society, Special Session on Number Theory and Algebraic Geometry, Muncie, Indiana, 1989. "The Nonring CMC Subsets of a Ring."

University of Washington, Seattle, Washington, Algebra Seminar, 1990. "A Unified Valuation Theory for Commutative Rings."

1990 Summer Meeting of the American Mathematical Society, Special Session on Algebraic Geometry, Columbus Ohio, 1990. "Prime-like subsets of a commutative ring."

Ninety-seventh Annual Meeting of the American Mathematical Society, Special session on Commutative Algebra, San Francisco, California, 1991. "On orderings and V-valuation theory for rings."

893rd Meeting of the American Mathematical Society, Special Session on Commutative Algebra and Probability Groups, Eugene, Oregon, 1994. "On Valuations and Term Orderings of Polynomial Rings."

1996 Summer Meeting of the American Mathematical Society, Special Session on Commutative Algebra, Seattle, Washington, 1996. "On the Seminormalization of Rees rings."

Joint Meeting of the South African, London, and American Mathematical Societies, Special Session on Commutative Algebra and Algebraic Geometry, Pretoria, South Africa, 1997. "Weak Subintegral Closure of Ideals and Weak Normalization of Rees Rings."

924th Meeting of the American Mathematical Society, Special Session on Commutative Algebra, Montreal, Canada, 1997. "On the weak subintegral closure of ideals."

The Curves Seminar at Queen's, Kingston, Ontario, Canada, 1997. "The Rees algebra of a complete intersection."

Midwest Algebraic Geometry Conference, South Bend, Indiana, 1997. "Weak subintegral closure of ideals and weak normalization of Rees rings."

105th Annual Meeting of the American Mathematical Society, Special Session on Singularities in Algebraic and Analytic Geometry, San Antonio, Texas, 1999. "On weak subintegral closure of monomial ideals."

Computational Commutative Algebra Conference VI , Torino, Italy, 1999. "The weak subintegral closure of a monomial ideal."

University of Göttingen Invariant Theory Seminar, Göttingen, Germany, June 1999. "Weak normalization of varieties and weak subintegral closure of ideals."

Missouri Algebraic Geometry Conference, Columbia, Missouri, 1999. "Weak normalization and weak subintegral closure."

106th Annual Meeting of the American Mathematical Society, Special Session on Singularities in Algebraic and Analytic Geometry, Washington, D.C. 2000. "Weak subintegral closure and Rees valuations of ideals."

University of Hawaii, Honolulu, Hawaii, Algebra Seminar, December 2000. "Normal monomial ideals."

107th Annual Meeting of the American Mathematical Society, New Orleans, Louisiana, January 2001. Session on Commutative Rings, "Normal monomial ideals."

Annapolis Algebraic Geometry Conference, Annapolis, Maryland, 2001. "Normal m-primary monomial ideals."

Notre Dame Algebraic Geometry Seminar, South Bend, Indiana, 2001. "Normal monomial ideals."

108th Annual Meeting of the American Mathematical Society, San Diego, California, Special Session on Computational Commutative Algebra, 2002. "Normal homogenous ideals."

Purdue Commutative Algebra Seminar, West Lafayette, Indiana, 2003. "Weak subintegral closure and reductions of ideals".

987th Meeting of the American Mathematical Society, Special Session on Commutative Algebra, San Francisco State University, San Francisco, CA, May 2003. "Weak subintegral closure of ideals: local characterization and connections with reductions."

111th Annual Meeting of the American Mathematical Society, Atlanta, Georgia, Session on Algebra, January 2005. "Serre's condition R_k for affine semigroup rings."

1006th Meeting of the American Mathematical Society, Special Session on Homological Algebra and Its Applications, Lubbock, Texas, April 2005. "The regularity condition R_k of Serre for affine semigroup rings."

Midwest Algebra, Geometry, and Interactions Conference, University of Notre Dame, IN, October 2005, "Regularity for affine semigroup rings over an arbitrary field."

Purdue University, West Lafayette, IN, Commutative Algebra Seminar, October 2005, "Weak subintegral closure for ideals and connections with equisingularity."

112th Annual Meeting of the American Mathematical Society, San Antonio, Texas, Special Session on Commutative Rings and Monoids, January 2006, "The regularity condition R_k of Serre."

Fields Institute Summer School & Conference On Valuation Theory And Integral Closures In Commutative Algebra, July 3-22, 2006, Ottawa, Canada, "Weak subintegral closure of ideals and connections with reductions and valuations."

115th Annual Meeting of the American Mathematical Society, Washington, DC, Special Session on Commutative Rings, January 2009, "Seminormality and weak normality."

University of California, Riverside, CA, Colloquium, May 2009, "Weak normality and seminormality."

University of Oregon, Eugene, OR, Colloquium, June 2009, "Weak normality and seminormality."

116th Annual Meeting of the American Mathematical Society, San Francisco, CA, Special Session on Commutative Algebra, January 2010, "A new element-wise criterion for weak subintegrality."

MAA MathFest Portland, OR, AWM-MMA Etta Z. Falconer Lecture, August 2014, "From Algebraic to Weak Subintegral Extensions in Algebra and Geometry"

Distinguished Lecture at Clemson University, Clemson, SC, January 2019, "Algebra and Geometry Throughout History: A Symbiotic Relationship." (slides at https://pages.uoregon.edu/vitulli/Clemson2018_V4.pdf)

Other Meetings/Programs Attended

Joint Mathematics Meetings: 1975, 1976, 1980, 1986, 1991, 1999, 2000, 2001, 2002, 2005, 2006, 2009, 2010, 2011, 2013, 2014; 2015, 2016; Summer Meetings: 1984, 1990, 2014.

Pacific Northwest Geometry Seminar, Winter, Spring, Fall 1977; Fall, Winter 1978; Winter 1979, Spring 1982, Spring, Fall 1983; Fall 1984, Winter 1985, Winter, Fall 1986.

Twenty-ninth Summer Research Institute of the American Mathematical Society on Singularities, Humboldt State University, Arcata, California, 1981 (invited participant).

Canadian Mathematical Society Summer Seminar in Algebraic Geometry, University of British Columbia, Vancouver, B.C., 1984.

Thirty-third Summer Research Institute of the American Mathematical Society on Algebraic Geometry, Bowdoin College, Brunswick, Maine, 1985 (invited participant).

Midwest Commutative Algebra Conference, Purdue University, West Lafayette, Indiana, March, 1986.

International Congress of Mathematicians, University of California, Berkeley, California, August 1986.

M.S.R.I. Microprogram on Commutative Algebra, Mathematical Sciences Research Institute, Berkeley, California, June – July 1987.

837th Meeting of the American Mathematical Society, University of Nebraska, Lincoln, Nebraska, October, 1987.

852nd Meeting of the American Mathematical Society, Ball State University, Muncie, Indiana, October, 1989.

45th Summer Research Institute of the American Mathematical Society on Quadratic Forms and Division Algebras, University of California, Santa Barbara, California, July, 1992 (invited participant).

American Council on Education Conference of the President's Agenda III, Johns Hopkins University, Baltimore, Maryland, July 1993.

884th Meeting of the American Mathematical Society, Syracuse University, Syracuse, New York, 1993.

2nd Annual Meeting of the AMS-MAA -ASA-AWM -IMS-NCTM-SIAM Joint Committee on Women in the Mathematical Sciences, Chicago, Illinois, October 1995.

Mathematical Sciences Research Institute, Berkeley, California, Special Program on Commutative Algebra, August – December 2002 (invited participant).
1012th Meeting of the American Mathematical Society, Eugene, OR, November 2005.
Minicourse on Interactive Excel Workbooks, 112th Annual Meeting of the American Mathematical Society, San Antonio, Texas, January 2006.
American Institute of Mathematics Research Conference Center (ARCC) Workshop on "Integral Closure, Multiplier Ideals and Cores," Palo Alto, CA, December 17 – 21, 2006 (invited participant).
Commutative Algebra and Its Interactions: A Conference in Honor of Mel Hochster, Ann Arbor, MI, July 31 – August 5, 2008
MAA MathFest, Portland, OR, August 6 – 9, 2014
AWM Research Symposium, University of California, Los Angeles, April 2017.
2019 Joint Mathematics Meetings, Baltimore, MD, January 2019.

Recent Curriculum Development

After consultation with faculty in the Lundquist School of Business, I initiated a project to change the way we teach the Calculus for Business and Social Sciences sequence. With the goal of reducing the drop out and failure rates, I developed an online Preparedness Quiz that is supported by several large pools of questions on Blackboard. Students are given feedback when they answer questions incorrectly and are provided with links to online tutorials that review relevant topics. They can then take the Preparedness Quiz again. Following the advice of colleagues in the School of Business I replaced graphing calculators with Excel as a technology aid in the sequence. I created highly interactive Excel assignments that help students solve problems by combining topics from calculus with the computing capacity of Excel. After conducting a usability study in the fall of 2006 these workbooks were redesigned. These are just 2 components of the project. This endeavor started in the summer of 2005 through the spring of 2007 and was supported by a grant from the UO Educational Technology Committee.

Committee Service and Other Professional Activities

Departmental Committees:	Honors College Committee, Undergraduate Affairs: Advising, Committee on the Future of the Department Committee to Select a Department Head (chair), Faculty Search Committee (chair), Executive Committee (chair), Travel Committee (chair) Graduate Affairs: Graduate Advising and Master's Degree Subcommittee (chair).
University	President (2007 – 09) and UO Representative to Association of Oregon Faculties (2004 – 09)
and	Senate Budget Committee 2006 – 2009 (Chair 2007 – 08) United Academics of the University of Oregon 2009 – 2011 University Senate 2010 – 2012 Sponsor of the AWM Student Chapter at UO 2013 - present
Community Service:	President, Secretary, Treasurer, and Membership Chair of Phi Beta Kappa, University Senate, Dean's Advisory Committee (Chair) Burlington Northern Foundation Award Committee, EORP/IntroDUCKtion Advisor, Vice-President of the Faculty Club Board of Directors, Committee on the Status of Women (chair), ad hoc Senate Committee on Affirmative Action, Graduate Council, Graduate School Fellowship Selection Committee,

CSWS Executive Committee, CSWS Internal Grants Committee (co-chair) CSWS Study Group on Gender & Science (chair), Goldwater Scholarship Selection Committee, Grad School Tuition Waiver
Fellowship for Women in Physical Sciences Selection Committee, Advocates for Women Faculty, CSWS Research Interest Group on Rationality, Intuition and Gender in Science and Other Creative Processes (chair)

Assn. for Women in Math. representative to the AMS-MAA-ASA-AWM-IMS-NCTM-SIAM Joint Committee on Women in the Mathematical Sciences (the JCW is a national level committee), 1995-1998.

Co-chair of the JCW Subcommittee on Recent Employment Trends for New Doctorates, 1995-1998 (see "Other Publications").

Referee for professional journals, conference proceedings, and the National Science Foundation.

Co-organizer and principal speaker in the Algebraic Geometry Seminar, 1976-1984, and Commutative Algebra Seminar, 1993-1994, 2000-2001, University of Oregon.

Speaker in the Algebra Seminar, University of Oregon.

Co-organizer of the Eugene meetings of the Pacific Northwest Geometry Seminar: Spring 1977 and 1982, Fall 1983, and 1986.

Chair of the preliminary examination committees of Anne Brown, Stan VerNooy, Laurie Burton, Allison Cooper, and Heather Coughlin.

Chair of the thesis committees of Kenneth Valente (co-chair; Ph.D. 6/85), Stan VerNooy, Laurie Burton (Ph.D. 12/95), and Heather Coughlin (Ph.D. 8/04).

Grad School-appointed mentor for Shasta Willson, Kala Schrager, Holly Swisher, Pauline Finn, Maiijalena Low, Kathryn MacDonald, and Whitney George Montgomery.

Panelist for: "Expanding Your Horizons (in Science and Mathematics)", Eugene, Oregon, 1985 & 1986; "Doing Research in Mathematics", University of Washington, Seattle, Washington, 1990; "The Climate for Women in Science: How Chilly Is It"?, University of Oregon, Eugene, Oregon, 1993.

Consultant for: "Expanding Your Horizons (in Science and Mathematics)", Eugene, Oregon, 1994.

Panelist in NSF-sponsored Symposium on Graduate Study in Science for Undergraduate Women, Oregon State University, April 1992 and April 1994.

Panelist for AWM panel on "A Celebration of Women's Contributions, Past, Present, and Future, Minneapolis MathFest, Minneapolis, MN, August 1995.

Creator and Director of Women in Math Web Site Project, partially supported by CSWS, https:/pages.uoregon.edu/wmnmath/.

Panel Moderator: for panel on Feminist Critiques of Science and Feminist Pedagogy, EnGendering Rationalities, conference sponsored by the Center for Women in Society, University of Oregon, Eugene, OR, April 18-20, 1997.

NSF Grant Review Panelist for Commutative Algebra, Ballston, Maryland, February 2001.

Participant in the Teaching Effectiveness Program's Instructional Technology Summer Symposium, September 2–4, 2003.

Participant in the Teaching Effectiveness Program's Essential Skills for Application in Teaching Instructional Technology Workshop, September 7 – 10, 2004.

Chair of the Poster Session Selection Committee for the Assn. for Women in Math, Fall 2005.

Co-chair of Association for Women in Mathematics (AWM) Workshop for Graduate Students and Recent Ph.D.s at the 112th Annual Meeting of the American Mathematical Society, San Antonio, Texas, January 2006.

Moderator of Association for Women in Mathematics Panel on Careers at the 112th Annual Meeting of the American Mathematical Society, San Antonio, Texas, January 2006.

Chair of Honors College Thesis Committees of Amy Hill (1994 – 95), Joseph Vandehey (2007 – 08)

AMS representative to the AMS-ASA-IMS-MAA-SIAM Data Committee (2009 – 2011) (the Data Committee is a national level committee and conducts the annual survey of the profession)

AMS-ASA-IMS-MAA-SIAM Committee to Review/Analyze NRC Rankings and Determine AMS Groups of Research Mathematics Departments

Association for Women in Mathematics Noether Lecture Committee (2007 – 2010) (chair in 2009-10)

Sponsor/mentor to Veronica Crispin-Quiñonez, Postdoctoral fellow of the Swedish Research Council

Mathematical Association of America, Earle Raymond Hedrick Lecture Series Selection Committee (2013 – 2015)

Association for Women in Mathematics, Chair of Michler-Mentoring Symposium and Panel Moderator for "Mentors Count!," 117th Annual Meeting of the American Mathematical Society, New Orleans, LA, 2011

At-Large Member to the Executive Committee of the Association for Women in Mathematics Executive Committee February 1, 2010 – January 31, 2016 (elected Fall 2009; reappointed February 1, 2014; reappointed February 1, 2019)

Member of Association for Women in Mathematics Committee on Policy and Advocacy, 2010 – 2016 (Chair, 2011 – 2016)

Member of the Association for Women in Mathematics Financial Task Force, 2010 and Financial Oversight and Investment Committee 2010 – present

Member of the Association for Women in Mathematics Media Committee and Facebook Administrator 2011 – present

Media Coordinator of the Association for Women in Mathematics 2019-2020

Society/Association Memberships: American Mathematical Society, Association for Women in Mathematics, Phi Beta Kappa