

Robert B. Kusner

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University of Massachusetts at Amherst
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Publications

49. Numerical Methods for the Canham-Helfrich Model of Biomembranes [preprint under revision] (with J. Chen, T. Yu & A. Zigerelli).
48. Critical Unlinks [in preparation] (with J. Sullivan).
47. Chirality for Knots and Fields [in preparation].
46. The Expected Total Curvature of Random Polygons, *Amer. J. Math* **137** (2015) 411-438 (with J. Cantarella, A. Grosberg & C. Shonkwiler).
https://www.press.jhu.edu/journals/american_journal_of_mathematics/future_publications/pre_print_content/AJM-cantarella-grosberg-kusner-shonkwiler-FINAL.pdf
45. Moduli spaces of complex projective structures and CMC surfaces [preprint under revision] (with K.G. Brauckmann, N. Korevaar & J. Sullivan).
44. Knots and links as bands [preprint under revision] (with Y. Diao).
43. Conjugate Plateau problems in homogeneous 3-manifolds [preprint under revision] (with K.G. Brauckmann).
42. Ropelength Criticality, *Geometry & Topology* **18** (2014) 1973-2043 (with J. Cantarella, J. Fu & J. Sullivan).
URL: <http://www.msp.warwick.ac.uk/gt/2014/18-4/p03.xhtml>
DOI: 10.2140/gt.2014.18.1973
41. Topological colloids, *Nature* **493** (2013) 200-205 (with B. Senyuk, Q. Liu, S. He, R.D. Kamien, T.C. Lubensky & I. Smalyukh)
40. There is no triangulation of the torus with vertex degrees 5, 6, . . . , 6, 7 and related results: Geometric proofs for combinatorial theorems, *Geometriae Dedicata* **166** (2013) 15-29 (with I. Ismestiev, G. Rote, B. Springborn & J. Sullivan).
URL: <http://link.springer.com/content/pdf/10.1007%2Fs10711-012-9782-5.pdf>
DOI: 10.1007/s10711-012-9782-5
39. Coplanar k-unduloids are nondegenerate, *Int. Math. Res. Notices* (2009) 3391-3416 [arXiv:0712.1865] (with K.G. Brauckmann, N. Korevaar, J. Ratzkin & J. Sullivan).
38. Some knotty ideas in geometry: pearl-number, ropelength, bandwidth and packing-density, [preprint under revision] (with W. Kusner).

37. Coplanar Constant Mean Curvature Surfaces. *Comm. Anal. Geom.* **15** (2007) 985-1023 (with K.G. Brauckmann & J. Sullivan).
36. On the nondegeneracy of constant mean curvature surfaces. *Geom. and Funct. Analysis* **16.4** (2006) 891-923 (with N. Korevaar & J. Ratzkin).
35. Criticality for the Gehring Link Problem, *Geometry & Topology* **10** (2006) 2045-2105 (with J. Cantarella, J. Fu, J. Sullivan & N. Wrinkle).
URL: <http://www.msp.warwick.ac.uk/gt/2006/10/p045.xhtml>
DOI: 10.2140/gt.2006.10.2045
34. The Average Crossing Number of Equilateral Random Polygons, *J. Physics A* **36** (2003) 11561-11574 (with Y. Diao, A. Dobay, K. Millett & A. Stasiak).
33. Three-Manifolds According to Grisha Perelman, *Sugaku Seminar* **42/10** (2003) 4-6 (in Japanese, with S. Okada & E. Cooper).
32. Triunduloids: Embedded CMC Surfaces of genus zero and three ends, *J. Reine Angew. Math.* **564** (2003) 35-61 (with K.G. Brauckmann & J. Sullivan).
31. The Second Hull of a Knotted Curve, *Amer. J. Math* **125** (2003) 1335-1348 (with J. Cantarella, G. Kuperperg & J. Sullivan).
30. Topology, Geometry and Conformal Structure of Properly Embedded Minimal Surfaces, *J. Diff. Geom.* **67** (2004) 377-393 (with P. Collin, W. Meeks & H. Rosenberg).
29. On the Minimum Ropelength of Knots and Links, *Inventiones Math.* **150** (2002) 257-286 (with J. Cantarella & J. Sullivan).
28. Conformal Structures and Necksizes of Embedded Constant Mean Curvature Surfaces, *Clay Mathematics Proceedings: Summer School on the Global Theory of Minimal Surfaces* **3** (2005) 585-596.
27. On Thickness and Packing Density for Knots and Links, *Contemporary Math.* **304** (2002) 175-180 [volume edited by Calvo, Millett & Rawdon].
26. Quantization of Energy and Writhe in Self-Repelling Knots, *New J. Phys.* **4** (2002) 1-11 (with P. Hoidn & A. Stasiak).
25. Constant Mean Curvature Surfaces with Three Ends, *Proc. Nat. Acad. Sci. (USA)* **97** (2000) 14067-14068 (with K.G. Brauckmann & J. Sullivan).
24. Embedded Constant Mean Curvature Surfaces with Special Symmetry, *Man. Math.* **99** 135-150 (1999) (with K.G. Brauckmann).
23. Tight knot values deviate from linear relations, *Nature* **392** (1998) 237-238 (with J. Cantarella & J. Sullivan).
22. Möbius-invariant knot energies, *Ideal Knots*, L. Kauffman, A. Stasiak & V. Katrich, eds. World Scientific, Singapore, 1998 (with J. Sullivan).

21. Constant mean curvature surfaces with cylindrical ends, *Mathematical Visualization*, C. Hege and K. Polthier, eds. Springer, Berlin, 1998, 107-116 & 371 (with K.G. Brauckmann & J. Sullivan).
20. On Distortion and Thickness of Knots, *Topology and Geometry in Polymer Science*, T. Lodge, D. Sumners and S. Whittington, eds. IMA Volumes in Math. and its Applications **103** (1997) 67-78 (with J. Sullivan).
19. In Memoriam, F. J. Almgren, Jr. *Experimental Math.* **6** (1997) 1-12 (with D. Epstein, E. Lieb, A. Marden & alii)
18. The Minimax Sphere Eversion, *Visualization and Mathematics*, C. Hege and K. Polthier, eds. Springer, Berlin, 1997, 3-20 & 359-360 (with K. Brakke, G. Francis and J. Sullivan).
17. The Spinor Representation of Surfaces in Space, arXiv dg-ga/9610005 (1996) and dg-ga/9512003 (1995) (with N. Schmitt).
16. Estimates for the Biharmonic Energy on Unbounded Planar Domains, and the Existence of Surfaces Minimizing the Squared Mean Curvature Integral, *Elliptic and Parabolic Methods in Geometry*, B. Chow, R. Gulliver & alii, eds. A.K. Peters, 1996, 67-72.
15. The Moduli Space of Complete Embedded Constant Mean Curvature Surfaces, *Geom. and Funct. Analysis* **6** (1996) 120-137 (with R. Mazzeo & D. Pollack).
14. Comparing the Weaire-Phelan Equal-volume Foam to Kelvin's Foam, *Forma* **11:3** (1996) 233-242 (with J. Sullivan). [Reprinted in: *The Kelvin problem*, Denis Weaire, editor. Taylor and Francis, London, 1997.]
13. New Surface Allotropes of Carbon, *Chem. Phys. Letters* **241** (1995) 522-527 (with P. Lahti & P. Lillya).
12. Möbius Energies for Knots and Links, Surfaces and Submanifolds, *Geometric Topology: Proceedings of the Georgia International Topology Conference*, William H. Kazez, editor. A.M.S./International Press (1997) 570-604 (with J. Sullivan).
11. The Global Structure of Constant Mean Curvature Surfaces, *Inventiones Math.* **114** (1993) 311-332 (with N. Korevaar).
10. Torus Knots Extremizing the Möbius Energy, *Experimental Math.* **2** (1993) 1-9 (with D. Kim).
9. The Structure of Constant Mean Curvature Embeddings in Euclidean Three Space, *Proceedings of A.M.S. Symposia in Pure Math* **54**, *Differential Geometry: Partial Differential Equations on Manifolds*, R. Greene and S.T. Yau, editors. (1993) 291-298 (with N. Korevaar).

8. The Number of Faces in a Minimal Foam, *Proc. Royal Soc. London A* **439** (1992) 683-686.
7. Minimizing the Squared Mean Curvature Integral for Surfaces in Space Forms, *Experimental Math.* **1** (1992) 191-207 (with L. Hsu & J. Sullivan).
6. Constant Mean Curvature Surfaces in Hyperbolic Space, *Amer. J. Math.* **114** (1992) 1-43 (with N. Korevaar, W.H. Meeks & B. Solomon).
5. A Maximum Principle at Infinity and the Topology of Complete Embedded Surfaces with Constant Mean Curvature, *Springer-Verlag Lecture Notes in Mathematics* **1481**, *Proceedings, Berlin Global Differential Geometry and Global Analysis* (1991) 108-114.
4. Bubbles, Conservation Laws, and Balanced Diagrams, *Geometric Analysis and Computer Graphics. MSRI Publications* **17** (1991) 103-108.
3. Structure of Complete Embedded Surfaces with Constant Mean Curvature, *J. Differential Geom.* **30** (1989) 465-503 (with N. Korevaar & B. Solomon).
2. Comparison Surfaces for the Willmore Problem, *Pacific J. Math.* **138** (1989) 317-345.
1. Conformal Geometry and Complete Minimal Surfaces, *Bull. Amer. Math. Soc.* **17** (1987) 291-295.
0. Global Geometry of Extremal Surfaces in Three Space, *Dissertation*, University of California, Berkeley.
- 1. An Olla-Podrida of Open Problems, Often Oddly Posed, *Amer. Math. Monthly* **90** (1983) 196-200 (with R. K. Guy).

Reports in general science journals

Rob Kusner's mathematical work has also been highlighted in several general science journals, including *Nature* (January 2013 and October 1998), *Science News* (October 1998), *Science* (July 1998) and *New Scientist* (Winter 1995), as well as at various blogs (ranging from Terry Tao's to Frank Morgan's at *The Huffington Post*). Rob was quoted in a *Science* news item (July 2012) praising Fernando Coda Marques's award of the Ramanujan Prize.

Degrees

University of California, Berkeley
 Ph.D. Mathematics 1988
 C. Phil. Mathematics 1984

Haverford College, Pennsylvania
B.A. Mathematics (High Honors) 1981
Physics (Honors) 1981

Post-Doctoral Advisor: Prof. Robert Hardt

Thesis Advisor: Prof. Richard M. Schoen

Experience

University of Massachusetts, Amherst
Professor, 1999–
Associate Professor, 1992–99
Assistant Professor, 1988–92

Mathematical Sciences Research Institute, Berkeley
Research Professor 2016
Member 1994, 1996–97, 2001, 2003–04

ICERM, Brown University, Providence
Member 2015

University of Pennsylvania
Visiting Professor 2008–

Institute for Advanced Study, Princeton
PCMI Research Program 1992, 2014
Member 1992–93, 1996–97

Centre de Recerca Matematica, Barcelona, Catalunya, Spain
Visiting Member 2013

Universidad del Granada, Spain
Visitor in Geometria 1996, 2008, 2012, 2013

Isaac Newton Institute, Cambridge, England
Member and Visiting Fellow 2002, 2012, 2013

University of Utah
Visiting Professor 2004–2012

Kavli Institute for Theoretical Physics, U C Santa Barbara
Member and Program Organizer 2012

Centro di Ricerca Matematica Ennio De Giorgi, SNS Pisa
Visiting Member 2011

Institute for Mathematics and its Applications, Minneapolis
Member 1996, 2008

Aspen Center for Physics
Member and Workshop Organizer 2004, 2008

Universite' de Tours, France
Visiting Professor 2003–2008

I.M.P.A., Rio de Janeiro, Brazil
Visiting Member 1988, 2007

University of California, Berkeley
Visiting Professor 2003–04

Max Planck Institute for Complex Systems, Dresden, Germany
Visiting Member 2002

University of Minnesota, Minneapolis
Visiting Professor 1996

Geometry Center, Minneapolis
Visiting Professor 1994

Rice University
Visiting Professor 1992

Five Colleges Geometry Institute
Research Director 1990–91
REU Mentor 1993

Technische Universitat, Berlin
Visitor in Geometrie 1990, 1993

I.H.E.S., Bures sur Yvette, France
Visiting Member 1989

University of California, Santa Barbara
Visiting Research Assistant Professor 1988–89

Stanford University
Instructor & Visiting Scholar 1987–88

University of California, San Diego
Research & Teaching Associate 1985–87

University of California, Berkeley
Research & Teaching Assistant 1982–85

Thesis Students

Jingmin Chen, Ph. D. (at Drexel, joint with T. Yu) 2015.

Kyle Vanderwerf, Undergraduate Senior Thesis (joint with Physics) 2014.

Dugan Hammock, M.S. 2013.

Michael Kreisel (Amherst College), Senior Honors Thesis 2010.

Diego Belfiore, M.S. 2009.

Eli Damon [Cooper], The Gauss-Green Form on the Moduli Space of Unduloids, Ph.D. 2007.

Evan Innis, Undergraduate Senior Thesis 2006.

Elena Giorgi, M.S. 2000.

Huayong Yang, M.S. 1998.

James Lawrence, Undergraduate Senior Thesis 1998.

Jorgen Berglund, Minimal and CMC Surfaces in 3-Manifolds, Ph.D. 1997.

Nicholas Schmitt, Minimal Surfaces with Embedded Planar Ends, Ph.D. 1993.

Wayne Rossman, Constant Mean Curvature Surfaces in Euclidean and Hyperbolic 3-Space, Ph.D. 1992.

External Doctoral Panels

U. Autonomadad Madrid (SPAIN) 2012 (panel president)

T. U. Darmstadt (GERMANY) 2010 (panel president)

U. Federale de Ceara (Fortaleza, BRAZIL) 2004

Postdoctoral Advisees

Yasha Savelyev (presently at ICMAT, Madrid)

Hao Wu (presently at George Washington University)

Jesse Ratzkin (presently at Univerity of Cape Town, South Africa)

Bernd Ammann (presently at Universität Regensburg, Germany)

Jason H. Cantarella (presently at University of Georgia, Athens)

Nicholas Schmitt (presently at Universität Tübingen, Germany)

Bo Guan (presently at Ohio State University, Columbus)

John M. Sullivan (presently at University of Illinois, Urbana, and Technische Uni, Berlin)

Karsten G. Brauckmann (presently at Uni Darmstadt, Germany)

Professional activities

Board of Trustees, Association of Members of the Institute for Advanced Study, Princeton (2015–).

Editorial Board, *Experimental Mathematics* (1995–).

Co-Director of the Center for Geometry, Analysis, Numerics and Graphics (GANG), University of Massachusetts at Amherst (1993–).

Organizer, Workshop on Small Clusters, Polymer Vesicles and Unusual Minima, ICERM (2015)

Organizer, Miniprogram on Knotted Fields, Kavli ITP, UC Santa Barbara (2012).

Organizer, Workshop and Knots, Centro Ennio De Giorgi, SNS Pisa (2011).

Organizer, Workshop on Geometry of Condensed Matter, Apsen Center for Physics (2008).

Proposal reviewer for NSF Programs in Geometric Analysis; Topology and Foundations; Computational Mathematics; Materials Theory; Gravitation Theory.

Referee for various journals and proceedings, including: Journal of Differential Geometry; Annals of Mathematics; Communications in Analysis and Geometry; AMS Journals; Amer. J. Math; Pacific J. Math.; Topology and its Appl.; Proc. Royal Soc. London; Math. Zeit.; Duke Math. J.; Amer. J. Physics; Tohoku Math. J.; and several other journals involving analysis, geometry and topology.

External reviewer for numerous personnel cases around the world, including a recent senior “promotion-above-scale” case at the University of California

Program Committee, Visualization and Mathematics, Berlin, (1997).

Organizer of the Five Colleges Geometry Institute (1990–94).

Organizer of AMS Special Sessions on Low Dimensional Geometry (Philadelphia, Oct 1991), on Optimal Geometry (Urbana, Mar 1999), on Geometric Analysis (Storrs, Oct 2007), and on Knots, Links, 3-manifolds & Physics (New Orleans, Jan 2011).

Mentor for NSF Research Experiences for Undergraduates (at Five Colleges Geometry Institute, at the Geometry Center, and at GANG).

Member of NSF panels reviewing CARGO, REU/RUI, RGI.

Member: American Mathematical Society; American Physical Society; Institute of Electrical and Electronics Engineers.

Grants

PI, NSF Grant DMS-0076085, Variational Problems in Low-Dimensional Geometry and Topology (2000–2004)

Co-PI, NSF Grant DMS-0079536, SCREMS (2000–2003)

Sponsoring Senior Scientist, NSF Postdoctoral Research Fellowship for Jason Cantarella, at University of Massachusetts, Amherst (1999–2000)

PI, NSF Grant DMS-9704949, Variational Problems in Low-Dimensional Geometry and Topology (1997–2000)

Co-PI, NSF Grant DMS-9626804, GANG: An Interdisciplinary Teaching and Research Environment (1997–2000)

PI, DOE Grant DE-FG02-86ER25015, Computation and Graphics in Mathematical Research (1994–95)

PI, NSF Grant DMS-9404278, Variational Problems in Geometry and Topology (1994–97)

Co-PI, NSF Grant DMS-9312087, Computational Methods in the Mathematical Sciences (1993–97)

Co-PI, DOE Grant DE-FG02-86ER25015, Computation and Graphics in Mathematical Research (1992–94)

Co-PI, NSF Grant DMS-9013220 establishing Five Colleges Geometry Institute, Geometry in the Machine Age, one of three NSF Regional Geometry Institutes (1990–94)

PI, NSF Grant DMS-8908064, Global Geometry of Extremal Surfaces (1989–91)

Other awards and honors

Current IMU logo based on our ropelength-critical Borromean Rings (2006)

Shoemaker Distinguished Lecturer, University of Toledo (1999)

NSF Postdoctoral Research Fellowship (1991–94)

Regents Fellow, University of California, Berkeley (1985–86)

Wheeler and Goewy Fellow, University of California, Berkeley (1981–82)

Phi Beta Kappa (1980)

RPI Science Medal (1977)

Invited seminars

Plenary Addresses to the 2013 workshop on Conformal Geometry and Geometric Analysis at CRM Barcelona (Catalunia, SPAIN), the 2012 workshop on Geometric PDE at ICMAT (Madrid, SPAIN), 2010 BIRS workshop on Semilinear PDE in Geometry and the De Giorgi Problem (Banff, CANADA), the 2008 IMA workshop on Geometric Singularities (Minneapolis, USA), 2007 celebration for the 60th birthdays of W. Meeks and D. Hoffman (Buzios, BRAZIL), 2005 AIM workshop on the Global Theory of Minimal Surfaces (Palo Alto, USA), the 2005 Gordon Conference on Liquid Crystal Geometry (New London, New Hampshire, USA), the 2004 Hauptstudium Kolloquium (Darmstadt, GERMANY), the 75th Birthday Celebration of Manfredo do Carmo in 2004 (Maceio, BRAZIL), the 2003 Retirement Celebration for Jean Taylor (Rutgers, USA), the 60th Birthday Celebration of Harold Rosenberg in 2002 (Dijon, FRANCE), the Euler Math Institute (St Petersburg, RUSSIA), the 2002 Texas Geometry and Topology Festival (Lubbock, USA), the 2001 Clay/MSRI Summer School (Berkeley, USA), the 2000 Spitalfields Day (Newton Institute, Cambridge, UK), the 1999 JAMI Workshop at Johns Hopkins (Baltimore, USA), the 1997 Lehigh Geometry Festival (Bethlehem, USA), the 1993 International Topology Conference (Athens, Georgia, USA), the 1992 Texas Geometry and Topology Festival (Houston, USA), the 1991 GADGET Workshop (Granada, SPAIN), and the 60th Birthday Celebration of Manfredo do Carmo in 1988 (Rio de Janeiro, BRAZIL); also over one hundred other research lectures at mathematics and physics institutions and professional meetings (as well as presentations at more than a dozen AMS special sessions) over the past decade, including: Ecole Normale Superieure (Paris, FRANCE), Institute for Advanced Study (Princeton, USA), Mathematische Institut and SFB256 (Bonn, GERMANY), KFA Nuclear Physics Center (Julich, GERMANY), Technische Universität (Berlin, GERMANY), I.H.E.S. (Bures sur Yvette, FRANCE), Mathematisches Forschungsinstitut (Oberwolfach, GERMANY), Freie Universität (Berlin, GERMANY), MSRI (Berkeley, USA), Universidad del Granada (SPAIN), I.M.P.A. (Rio de Janeiro, BRAZIL), Centre de Physique (Les Houches, FRANCE), Stanford University (USA), University of California (Berkeley, USA), Courant Institute (New York, USA), CUNY Graduate Center (New York, USA), University of Pennsylvania (Philadelphia, USA), University of Minnesota (Minneapolis, USA), Indiana University (Bloomington, USA), University of Texas (Austin, USA), Lehigh University (Bethlehem, USA), University of Washington (Seattle, USA), University of Iowa (Iowa City, USA), University of Connecticut (Storrs, USA), Rutgers University (New Brunswick, USA), Washington University (St. Louis, USA), University of Arizona (Tucson, USA), University of Illinois (Urbana, USA), University of Chicago (USA), Harvard University (Cambridge, USA), George Washington University (DC, USA), Northeastern University (Boston, USA), MIT (Cambridge, USA), Johns Hopkins University (Baltimore, USA), EPFL (Lausanne, SWITZERLAND), NCTS (Hsinchu, TAIWAN), Kobe University (JAPAN), Seoul National University (KOREA), University of Ten-

nesse (Knoxville, USA), University of North Carolina (USA), University of Warwick (UK), University of Wisconsin (Madison, USA), University of Utah (Salt Lake City, USA), Université de Paris VII (France), Université de Tours (FRANCE), University of California (Davis, USA), the University of California (Santa Cruz, USA), BIRS (Banff, CANADA), UFC (Fortaleza, BRAZIL), UBR (Brasilia, BRAZIL), Aspen Center for Physics (Aspen, USA), Brandeis University (Waltham, USA), Hausdorff Institute (Bonn, GERMANY), University of California (Irvine, USA), ICMS (Edinburgh, UK), Imperial College (London, UK), Wills Laboratory, University of Bristol (UK), Aberystwith University (UK), Kings College (London, UK), University of Leicester (UK), McGill University (Montreal, CANADA), Erwin Schrödinger Institute (Vienna, AUSTRIA) and Brown University (Providence, USA)..

Professional and personal information

Rob Kusner's expertise is in variational methods of geometric analysis. For most of his career Rob has focused on questions related to classifying embedded constant mean curvature (CMC) surfaces. He has also worked on variational problems in low dimensional geometry and topology (such as minimal surfaces, Willmore surfaces, conformally flat manifolds with constant scalar curvature, curvature flows, geometric knots and links, configuration spaces and contact structures), as well as issues of mathematical experimentation and visualization.

Kusner has been involved with the Center for Geometry, Analysis, Numerics & Graphics (GANG) since its inception in the 1980's and became its Co-Director in 1993, after a year at the Institute for Advanced Study in Princeton on an NSF Fellowship; since 2010, GANG has been a "virtual" center with a well-linked website (www.gang.umass.edu) hosted at the UMass math department. In 1995, Rob joined the editorial board of the journal *Experimental Mathematics*, on which he remains active. He returned to the IAS, and also participated in the special geometric topology year at MSRI in Berkeley, during the 1996-97 academic year. During his 2003-04 sabbatical, Rob was again in the Bay Area, participating in the MSRI special year in geometry, and working with colleagues at Berkeley, Stanford and Utah. Starting in 2008, he became a visiting professor at the University of Pennsylvania, where he taught a course (while on sabbatical in 2011) and informally advised several math and physics Ph.D. students and post-docs. In 2012, Rob co-directed the Knotted Fields program at UCSB's Kavli Institute for Theoretical Physics during June and July, and was invited to be a Fellow of Cambridge University's Isaac Newton Institute for the fall semester Topological Dynamics programme (he returned briefly in spring 2013 for the INI programme on Liquid Crystals and returned again in spring 2014 for a workshop). Kusner is organizing a workshop at Brown's ICERM, where he is a member for the spring 2015 semester. Rob has been invited as a Research Professor at MSRI for their spring 2016 special semester in differential geometry.

Rob was born in Philadelphia, Pennsylvania. He attended the experimental Miquon School (1963-68) and the Friends' Select School (1968-77), while also working as a mechanic, farmer and house-builder. An advocate for alternative transportation, Kusner served for many years on the Amherst Public Transportation and Bicycle Committee, which he chaired from 1998-2000. He has also been a Conservation Commissioner (2000-03) and a Member of Amherst Representative Town Meeting since 1994. In March 2005, he was elected to Amherst's five-member Select Board, the executive body of the Town; he did not seek re-election in 2008, but was re-elected to Town Meeting that year and subsequently. Rob currently chairs the Norwottuck Rail Trail Advisory Committee for the Massachusetts DCR, and serves (or has served) on the boards of three area non-profits: MassBikePioneerValley, the North Amherst Community Farm, and Norwottuck Network. In 2012, Kusner was named the Pioneer Valley Bicycle Advocate of the Year.