2014 Mildred Dahne Award Application
Department of Mathematics and Statistics

The Department of Mathematics and Statistics is a vibrant community of teacher-scholars who significantly contribute to all aspects of The College of New Jersey, its surrounding community, and the larger academic discipline. Our faculty are excellent teachers and scholars and play leading roles on the campus and in regional, state, and national organizations.

The department consists of 22 tenured and tenure-track faculty, 2 full-time visiting faculty, over 25 part-time adjunct faculty, and two staff members. The department encompasses four separate fields of mathematics, applied mathematics, statistics, and mathematics education. We describe our achievements in teaching excellence, academic excellence, and department impact below.

1. Excellence in teaching and/or support of teaching

Our department provides excellent teaching that supports both our majors and majors in the sciences, social sciences, and business. Our success can be measured in several ways. Quantitatively, we are teaching a record number of overall students, majors, and minors. In the 2013-14 academic year, we are teaching 4168 students, a record number, and a 5% increase from 2012-13. We have 336 majors over the four years. Over the past five years, the number of mathematics and applied mathematics majors has increased by 50% to 138.

We maintain a great diversity of majors and minors. We support nine different majors and specializations: Mathematics, Applied Mathematics, Statistics, Mathematics Secondary Education, and Mathematics Education. The Mathematics Education major has tracks in Early Childhood Education, Elementary Education, Deaf and Hard of Hearing Education, Special Education, Language and Literacy, and Urban Education. We also support four minors in Mathematics, Statistics, Actuarial and Financial Risk Studies, and Quantitative Criminology.

The effectiveness of the Department's teaching can be seen in honors, student testimonials and the success of our graduates. This year, Dr. Karen Clark is the recipient of the Distinguished Teaching Award given by the New Jersey section of the Mathematical Association of America. Comments from the letters of recommendation from students include:

- "An amazing teacher who can distill complicated concepts clearly without leaving anybody behind in class"
- "After witnessing her influence on others, I realized that I wanted to have that same influence on a student someday."

Comments about the department as a whole from our annual senior survey include:

- "I think the Department of Math has such wonderful, intellectual professors. I was lucky to have great professors, advisers, etc."
- "I believe I got an amazing education here. I feel so prepared to teach mathematics in the secondary level. My math courses really challenged me and I think I have grown so much in result."
- "The math department felt like my family, it was amazing coming to class every day."

The department's graduates have also been very successful. In mathematics education, our department is proud that our graduates are highly sought after by New Jersey K-12 schools. Mathematics supervisors and principals from around the state often contact our department to inquire about our students as candidates for their job openings. Most, if not all, of our graduates

of Mathematics Secondary Education get a job within a few months of graduating, and 100% of our majors who take the Mathematics Praxis test for certification pass. Many of our students go onto graduate study, and in the 2012 graduating class, a record twelve of our majors went on to pursue graduate degrees. Other recent accomplishments include:

- Samuel Taylor '09 is earning a PhD in Mathematics from the University of Texas at Austin this spring. He was recently awarded a NSF Postdoctoral Fellowship in Mathematics to study at Yale University for 2014-2016.
- Brendan Kelly '08 is earning a PhD in Mathematics from the University of Utah this spring and has accepted a teaching position in Mathematics at Harvard University beginning in Fall 2014.
- Jamie Dalcourt '13 is finishing a Master's Program in Applied Statistics at Cornell University in Spring 2014.

The department annually enters teams in the national Putnam mathematics competition and the statewide Garden State Undergraduate Mathematics Conference (GSUMC). Mentored by Dr. Judit Kardos and Qifu Zheng, our teams do well, with TCNJ teams placing 4th, 5th, 8th out of 26 teams in the 2013 GSUMC and 91st out of 572 teams in the 2012 Putnam competition (TCNJ's best showing ever). Three students also participated in the National Undergraduate Research Poster Competition at the Joint Mathematics Meeting in Baltimore, MD in January 2014.

The Department continually works to ensure it has an up-to-date, innovative curriculum. Our external review in 2010 praised the uniqueness of our "introduction to proof" course that all majors take in their first year. In the past three years, the department has:

- Introduced a new specialization in Applied Mathematics (rare for liberal-arts schools)
- Introduced two new 400-level courses in Partial Differential Equations and Mathematical Modeling, a new 300-level Mathematical Biology course, a new 300-level course in Bayesian and Computational Statistics, a new 200-level course in Actuarial Mathematics and new capstone courses in mathematics and statistics.
- Created a Statistics partnership with George Mason University to enable our graduates to seamlessly pursue Masters degrees in Statistics.
- Updated each of the foundational courses of Calculus A, Calculus B, Business Calculus, and Statistics. New syllabi, textbooks, a closer collaboration of instructors of multiple sections, and an increased focus on integrating technology are some accomplishments.
- Introduced the use of placement tests to better place incoming first-year students in their mathematics courses. Online courses have also been introduced to help some entering students place out of developmental math courses.

2. Academic excellence

The Department of Mathematics and Statistics has distinguished itself by its scholarship. In the past year, the department faculty have published two books:

- *Count Like an Egyptian: A Hands-on Introduction to Ancient Mathematics*, David Reimer. Princeton University Press, 2014. This book gives a tour of the ancient Egyptian world and their mathematics. A review by Eli Maor, author of "e: The Story of a Number" states, "This book is by far the best presentation of Egyptian math I have read".
- *Gene Function Analysis, 2nd Edition. Methods in Molecular Biology,* Michael Ochs (editor). Humana Press, Totowa, 2014.

Additionally, Nancy Hingston has been invited to present in the Geometry session at the 2014 International Congress of Mathematicians (ICM) in Seoul, Korea. The ICM is the most prestigious mathematics conference in the world and an invitation to give an invited talk acknowledges the fundatmental importance of one's mathematical work.

Our faculty have published 30 articles in high-quality, referred journals since 2008. Many of these journals are the top journals in a their field. Due to space limitations, we include only a sample below. Additional recent scholarship by faculty include (We note that for many math journals, authors are listed alphabetically and not in order of priority. TCNJ student authors are underlined):

- **Hingston, N**, Rademacher-H.-B., "Resonance for Loop Homology of Spheres", J. Differential Geometry 93 (2013), no.1, 133-174.
- **Cunningham, R.F**. & Yacone, E. (2013). Algebra Textbooks' and Teachers' Methods: Simplifying rational expressions. *International Journal of Research in Educational Methodology*, 4, 1, 457-468, (ISSN: 2278-7690).
- **Ochs, MF**, Farrar JE, Considine M, Wei Y, Meschinchi S, Arceci RJ. Outlier Gene Set Analysis Combined with Top Scoring Pair Provides Robust Biomarkers of Pathway Activity. in A. Ngom et al. (Eds.): PRIB 2013, LNBI 7986, Springer-Verlag, Berlin, 47–58, 2013.
- **Curtis, C**., *The SL(2,C) Casson invariant for Dehn surgeries on two-bridge knots,* with Hans U. Boden, Algebraic and Geometric Topology 12(4) (2012), 2095-2126.
- **Gevertz, JL**,.Optimization of vascular-targeting drugs in a computational model of tumor growth. Physical Review E 85: 041914 (2012).
- **Clifford, A**.; Goldstein, R. Z,. *Sets of primitive elements in a free group.* J. Algebra *357 (2012), 271–278.*
- **Holmes, D**., "Who wrote the Chard Reports? A Stylometric Analysis," Journal of the Anglo Zulu War Historical Society, Vol. 32. (2012).
- **Wang, C.,** "Dynamic Data Visualization" in CSBIGS (Case Studies in Business, Industry and Government Statistics), Vol. 4, No. 1,p. 9-22, 2010.
- Selgrade, J., **Harris, L.**, and Pasteur, R, (2009). *A model for hormonal control of the menstrual cycle: structural integrity but sensitivity with regard to data.* Journal of Theoretical Biology 260, 572 – 580.
- **Hagedorn, T.**, "Computation of Jacobsthal's Function h(n) for n < 50," Mathematics of Computation, 78 (2009), 1073-1087.

Other noteworthy scholarly highlights of our faculty include:
- Nancy Hingston was an invited visitor at the Institute for Advanced Study for the 2012-13 academic year. The Institute only makes 2-3 such invitations each year.
- Robert Cunningham was invited to give the keynote talk "Building Student Understanding of Mathematics through Reasoning and Proof" at the international *Mathematics and Education Symposium* at the National University of Ireland at Galway, Ireland (March, 2013).
- David Holmes gave the invited keynote address "'Who was the Author? Using Statistics to identify Authorship'" at the international symposium on "Turkish Language and Literature: Language and Style Analysis of Literary Texts" at Suleyman Demirel University, Isparta, Turkey in 2011. Holmes was also selected by the Faculty Senate in Spring 2011 to give the Colloquium for Faculty Research & Creative Activity.
- Aigli Papantonopoulou's "Algebra: Pure & Applied" (Pearson, 2001) continues to be a widely used Abstract Algebra textbook. It has been recently used at Rutgers, the University of Massachusetts -- Amherst, Temple, Tufts, University of Rochester, Morehouse College, Texas Tech, University of Iowa, and Kent State University.

3. Departmental Impact:

Our Department has a long history of important contributions to TCNJ, the surrounding community, the state of New Jersey, as well as the larger regional and national academic community. At TCNJ, our faculty have been involved in numerous important leadership roles:

- Cynthia Curtis is the President of the Faculty Senate and has held this position for the past five years since 2009.
- Tom Hagedorn is the Coordinator of the First Seminar Program and has held this position for the past four years since 2010. Responsibilities included running the Summer Reading Program and coordinating the Academic Integrity presentations for all incoming first-year students.
- Carlos Alves served as Dean of Academic Services from 2004-06 and Chair of the Council of Associate Deans in the School of Arts and Sciences from 1999-2001. During this time, the School of Arts and Sciences was led by the Council of Associate Deans.

Additionally, faculty have also chaired and led numerous campus-wide committees.

- (Provost Search) Cindy Curtis chaired the Provost and Vice President for Academic Affairs Search Committee in 2011-12.
- (Steering) Andrew Clifford served as Co-Chair of Steering in 2011-12.
- (CPP) Andrew Clifford co-chaired CPP from 2007-09; and Vice-Chair from 2006-07. Tom Hagedorn co-chaired CPP from 2005-06, and was the Vice-Chair from 2003-05.
- (CAP) Cathy Liebars chaired CAP for two terms from 2009-11. Andrew Clifford chaired CAP in 2004-05.
- (CFA) Aigli Papantonopoulou chaired CFA in 2002-03 and was Vice-Chair in 2003-04.
- (Middle States): Andrew Clifford co-chairs the 2013-14 Middle States Subcommittee on Academic Assessment. For the 2004-05 Middle States Review, Andrew Clifford (Institutional Assessment) and Tom Hagedorn (Planning and Allocation of Resources) each chaired one of the three subcommittees.
- Farshid Safi serves as Vice-Chair of the Cultural and Intellectual Program Council for 2013-14.
- Suriza van der Sandt co-chaired the Facilities and Construction Planning Council for 2012-13.
- Cindy Curtis co-chaired the Excellence and Signature Programs Strategic Planning Task Force in 2012-13. Tom Hagedorn co-chaired the "Ad-Hoc Committee Regarding the Structure of the Schools of Arts and Communication and Culture and Society" in 2008.
- Carlos Alves, Cindy Curtis, Tom Hagedorn, and Aigli Papantonopoulou have all served on the Faculty Senate Executive Board. Karen Clark, Leona Harris, Cathy Liebars have also served on the Senate.

Faculty have also served as members on numerous college-wide committees. They have also made significant contributions to the larger community. Again, only a sample can be listed:

- Cathy Liebars is a co-director of a Woodrow Wilson Foundation Teaching Fellowship Grant that is supporting the revision of a Master of Arts in Teaching Program at TCNJ. This program addresses the urgent national need in education to bring exceptionally able math and science teachers into high-need schools.
- Leona Harris is the Co-Founder of the Infinite Possibilities Conference (IPC) designed to promote, educate, and support minority women in the mathematical sciences. She has been a member of the Advisory Board (2005-12), conference co-chair (2005, 2007), and co-PI on NSF (2007) and NSA (2007, 2012) grants supporting IPC.

- Karen Clark and Suriza van der Sandt were co-PIs for TCNJ's NSF funded Advancement Program (TAP) to ADVANCE Female Faculty Through Effective Career Development. This grant from 2009-13 focused on improving the support structure for female faculty to succeed and advance in their academic careers.
- The department, led by Karen Clark, Cindy Curtis, Judit Kardos, and Cathy Liebars, ran two Sonya Kovalesky Mathematics Day Conferences in 2011 and 2012 for female high school students in the local community. The purpose was to encourage mathematically-minded students to pursue a career using mathematics.
- Cindy Curtis and Nancy Hingston serve on the Organizing Committee for the "Women in Mathematics" Program at the Institute for Advanced Studies. Nancy has served since 1995 and Cindy since 2007. This program is an annual two-week program for promising female undergraduate students in mathematics from across the country. Many TCNJ female math majors have been able to participate in the program due to their involvement.
- Qifu Zheng organizes and hosts a testing site at TCNJ for 40-50 local middle and high school students to take the national mathematics exams given by the Mathematics Association of America. These tests are often administered by middle and high schools, but not all schools have the resources to do it. Students from approximately 10 different schools have been participating.
- Tom Hagedorn is a member of the Board of Education for the Princeton Public Schools (2014-2017).
- Cindy Curtis serves on the Advisory Council for the Science and Engineering Learning Center, at Manalapan High School in Manalapan, NJ. (2013 – present)

Faculty also play leading roles in their academic disciplinary organizations. We note that TCNJ faculty have led every New Jersey state mathematics organization at the secondary and undergraduate level.

- Tom Hagedorn and Karen Clark currently serve as Executive Officers for the New Jersey section of the Mathematical Association of America (MAA-NJ), the primary national organization dedicated to undergraduate teaching of mathematics. Tom is the current chair of the section (2013-15) and Karen has served as treasurer for the past decade (2002-2014). In addition, Cathy Liebars served as chair of MAA-NJ from 2003-05.
- Cathy Liebars co-founded and served as the President of the New Jersey Association of Mathematics Teacher Educators from 2009-2011. Cathy Liebars and Farshid Safi are both currently on the Executive Board for this organization.
- Michael Ochs is on the International Program Committee for the 2014 Biosignals conference.
- Farshid Safi is the 3rd Vice-President of the Association of Math Teachers of New Jersey (AMTNJ) for the 2013-14 year. He is also editor of the AMTNJ journal.
- Chamont Wang serves on the Program Committee for the 10th International Conference on Data Mining, 2014. He served in a similar role in 2011, 2012, and 2013.

Most members of the department are also involved on editorial boards or as referees. Michael Ochs serves as an Associate Editor of both the journal *BMC Bioinformatics* and *Frontiers in Bioinformatics and Computational Biology*. He also served as Editor-in-Chief of *Chemotherapy-Open Access* in 2012-13. Chamont Wang serves as an Associate Editor of the series *Case Studies In Business, Industry And Government Statistics.*

Faculty also serve as referees for many top quality journals as the following list shows:

Nature (Ochs), Proceedings of the National Academy of Sciences (Ochs), Inventiones Mathematicae (Hingston), Annals of Mathematics (Hingston), Topology and Its Applications (Curtis), Proceedings of the American Mathematical Society (Curtis), Science (Holmes), Digital Philology (Holmes), Mathematics of Computation (Hagedorn), Discrete Mathematics (Hagedorn), Primus (Hagedorn).

Appendix A: Complete List of Faculty Scholarship Since 2008

(We note that for many math journals, authors are listed alphabetically and not in order of priority. TCNJ student authors are underlined):

1. **Hingston, N**, Rademacher-H.-B., "Resonance for Loop Homology of Spheres", J. Differential Geometry 93 (2013), no.1, 133-174.
2. **Cunningham, R.F**. & Yacone, E. (2013). Algebra Textbooks' and Teachers' Methods: Simplifying rational expressions. *International Journal of Research in Educational Methodology*, 4, 1, 457-468, (ISSN: 2278-7690).
3. **Ochs MF**, Farrar JE, Considine M, Wei Y, Meschinchi S, Arceci RJ. Outlier Gene Set Analysis Combined with Top Scoring Pair Provides Robust Biomarkers of Pathway Activity. in A. Ngom et al. (Eds.): PRIB 2013, LNBI 7986, Springer-Verlag, Berlin, 47–58, 2013.
4. **Curtis, C**., *The SL(2,C) Casson invariant for Dehn surgeries on two-bridge knots,* with Hans U. Boden, Algebraic and Geometric Topology 12(4) (2012), 2095-2126.
5. **J.L. Gevertz**,.Optimization of vascular-targeting drugs in a computational model of tumor growth. Physical Review E 85: 041914 (2012).
6. **Clifford, A**.; Goldstein, R. Z,. *Sets of primitive elements in a free group.* J. Algebra *357 (2012), 271–278.*
7. **Holmes, D**., "Who wrote the Chard Reports? A Stylometric Analysis," Journal of the Anglo Zulu War Historical Society, Vol. 32. (2012).
8. **Holmes, D**., E.D. Johnson, "A Stylometric Foray into the Anglo-Zulu War of 1879," English Studies, Vol.93, No.3, pp 310-323 (2012).
9. **J.L. Gevertz**,. Computational modeling of tumor response to vascular-targeting therapies - Part I: Validation. Computational and Mathematical Methods in Medicine 2011.
10. Johnson, B.& **Van der Sandt, S**. (2011). Mathematics makes me sweat – The Impact of Pre-Service Courses on Mathematics Anxiety. Undergraduate Mathematics Preparation of School Teachers: The Journal (Volume 5: Teacher Attributes
11. **Curtis, C**., Taylor, S,. *The Jones polynomial and boundary slopes of alternating Montesinos knots*, Journal of Knot Theory and its Ramifications 20(10) (2011), 1345-1354.
12. **Clifford, A**.; Cummings, P. A.; Teymouri, J. Two cancellative commutative congruences and group diagrams. *Semigroup Forum* 82 (2011), no. 2, 338–353.
13. **Holmes, D**., 'Stylometry and the Search for S.W.Erdnase' (with R. Wiseman), Genii, Vol.74, No.2, pp 70-73 (2011).
14. **Hingston, N**., "Loop products on connected sums of projective spaces", A celebration of the mathematical legacy of Raoul Bott, 161–175, CRM Proc. Lecture Notes 50, Amer. Math. Soc., Providence, RI, 2010.
15. **Holmes, D**., 'The Diary of a Public Man: A Case Study in Traditional and Non-Traditional Authorship Attribution' (with D.W. Crofts), Literary and Linguistic Computing, Vol.25, No.2, pp 179-197 (2010).
16. **Clifford, A**.; Goldstein, R. Z. Subgroups of free groups and primitive elements. *J. Group Theory* 13 (2010), no. 4, 601–611.
17. **Cunningham, R.F**. & Roberts, A. (2010). Reducing the Mismatch of Geometry Concept Definitions and Concept Images Held by Preservice Teachers. *Issues in the Undergraduate Mathematical Preparation of School Teachers: The Journal,*Vol 1 (Content Knowledge),1-17.
18. **Wang, C.,** "Dynamic Data Visualization" in CSBIGS (Case Studies in Business, Industry and Government Statistics), Vol. 4, No. 1,p. 9-22, 2010.
19. **T. Hagedorn**, J. Hatley, "The Probability of Relatively Prime Polynomials in $Z_{p^n}[x]$," Involve, 3(2), (2010), 223-232.

20. **J.L. Gevertz** and S. Torquato, Growing heterogeneous tumors in silico. Physical Review E 80: 051910 (2009).
21. James F. Selgrade, **Leona A. Harris**, and R. Drew Pasteur (2009). *A model for hormonal control of the menstrual cycle: structural integrity but sensitivity with regard to data.* Journal of Theoretical Biology 260, 572 – 580.
22. **T. Hagedorn**, "Computation of Jacobsthal's Function h(n) for n < 50," Mathematics of Computation, 78 (2009), 1073-1087.
23. **Hingston, N**., "Subharmonic Solutions of Hamiltonian Equations on Tori", Annals of Mathematics, Vol. 170 (2009), No. 2, 529–560.
24. **Hingston, N**., "Loop Products and Closed Geodesics," Duke Math.J.Volume 150, Number 1 (2009), 117-209.
25. **Wang, C.,** "Profit Analysis of the German Credit Data," in Handbook of Statistical Analysis and Data Mining Applications, p. 651-680, Academic Press, 2009.
26. **T. Hagedorn**, G. Wilson, "Symbolic Computation of Degree 3 Covariants for a Binary Form," Involve, 2(5), (2009), 509-530.
27. Boden, H., **Curtis, C***., Splicing and the SL(2,C) Casson invariant*, Proc. Amer. Math. Soc. **136** (2008), 2615-2623.
28. **J.L. Gevertz**, G. Gillies and S. Torquato., *Simulating tumor growth in confined heterogeneous environments*, Physical Biology 5: 036010 (2008).
29. **Wang, C.,** "Data Mining for Large Datasets and Hotspot Detection in an Urban Development Project" in Journal of Data Science, Vol. 6, No. 3, 389-414, 2008.
30. **Leona A. Harri**s and Hugh A. Barton (2008). *Comparing single and repeated dosimetry data for perfluorooctane sulfonate in rats.* Toxicology Letters **181**, 148 – 156.

Appendix B: Full List of Department Contributions:

- Cathy Liebars is a co-PI of a Woodrow Wilson National Fellowship Foundation Grant that is supporting the creation of a Master of Arts in Teaching Program at TCNJ. This program addresses the urgent national need in education to bring exceptionally able math and science teachers into high-need schools.
- Leona Harris is the Co-Founder of the Infinite Possibilities Conference (IPC) designed to promote, educate, and support minority women in the mathematical sciences. She has been a member of the Advisory Board (2005-12), conference co-chair (2005, 2007), and co-PI on NSF (2007) and NSA (2007, 2012) grants supporting IPC.
- Karen Clark and Suriza van der Sandt were co-PIs for TCNJ's NSF funded Advancement Program (TAP) to ADVANCE Female Faculty Through Effective Career Development. This grant from 2009-13 focused on improving the support structure for female faculty to succeed and advance in their academic careers.
- Tom Hagedorn and Karen Clark currently serve as Executive Officers for the New Jersey section of the Mathematical Association of America (MAA-NJ), the primary national organization dedicated to undergraduate teaching of mathematics. Tom is the current chair of the section (2013-15) and Karen has served as treasurer for the past decade (2002-2014). In addition, Cathy Liebars served as chair of MAA-NJ from 2003-05.
- Leona Harris is a member of the Science Review Panel for the Ford Foundation's Graduate Fellowships Program. March 2014 (upcoming), 2013, 2011, 2010, and 2009.
- Farshid Safi is the 3rd Vice-President of the Association of Math Teachers of New Jersey (AMTNJ) for the 2013-14 year. He is also editor of the AMTNJ journal.
- Cindy Curtis and Nancy Hingston serve on the Organizing Committee for the "Women in Mathematics" Program at the Institute for Advanced Studies. Nancy has served since 1995 and

Cindy since 2007. This program is an annual two-week program for promising female undergraduate students in mathematics from across the country. ManyTCNJ female math majors have been able to participate in the program due to their involvement.

- Leona Harris is a member of the Advisory Committee for the Institute for Women's Policy Research's NSF ADVANCE project, "Pressing the Limits of Inclusion: Women of Color in Science and Engineering." (2012-present)
- Chamont Wang serves on the Program Committee for the 10th International Conference on Data Mining, 2014. He served in a similar role in 2011, 2012, and 2013.
- Qifu Zheng organizes and hosts a site for 40-50 local middle and high school students to take the national mathematics exams given by the Mathematics Association of America. These tests are often administered by middle and high schools, but not all schools have the resources to do it. Students from approximately 10 different schools have been participating.
- Leona Harris is a member of the Diversity Committee for the Park City Mathematics Institute (PCMI) aimed at increasing participation by under-represented minorities in PCMI's programs for students, college faculty, and secondary school teachers. (2009 – present)
- Leona Harris is member of the Education and Outreach Committee of the Statistical and Applied Mathematical Sciences Institute (SAMSI). (2010 – present)
- Robert Cunningham served as the President of the AMTNJ from 2003-05.
- Cathy Liebars and Farshid Safi frequently lead professional development workshops for inservice teachers around the state.
- Aigli Papantonopoulou serves on the Graduate Fellowships Committee at Barnard College.
- Cathy Liebars co-founded and served as the President of the New Jersey Association of Mathematics Teacher Educators from 2009-2011. Cathy Liebars and Farshid Safi are both currently on the Executive Board for this organization.
- Robert Cunningham served on the Organizing Committee for the 2006 national meeting of the National Council of Teachers of Mathematics (NCTM).
- Karen Clark and Tom Hagedorn have been significant contributors to the national WeBWorK software project since 2002. Karen and Tom have created a significant part of the Linear Algebra library and have had responsibility for its maintenance in the National Problem Library. They have led two workshops at regional meetings for college faculty on using the WeBWorK system.
- Aigli Papantonopoulou has served on the Advisory Board for the Educational Testing Service, for ACT, and Collegeboard.
- Cathy Liebars is a reviewer for the NCTM program review for NCATE (National Council of Accreditation of Teacher Education).