

THOMAS V. PAPATHOMAS – August 22, 2017

Professor, Department of Biomedical Engineering; Faculty Member, Center for Cognitive Science; Graduate Program in Psychology; Graduate Program in Neuroscience; Director, Laboratory of Vision Research, RUTGERS UNIVERSITY

1. EDUCATION

- **Ph.D.** Electrical Engineering and Computer Science, October 1977, Columbia University, School of Engineering and Applied Science, New York, NY. Advisor: Professor Omar Wing.
- **M.S.** Electrical Engineering and Computer Science, June 1972, Columbia University.
- **B.S.** Electrical Engineering and Computer Science, October 1971, Columbia University.

2. HONORS - RECOGNITION (details on next page)

- **Vision Sciences Conference Public Lecture, Dali Museum**, “Vision Research: Artists Doing Science - Scientists Doing Art,” Saint Petersburg, FL, May 17, 2014; also presented at the **Rutgers Zimmerli Museum**, March 2015, as well as in Greek at the **Archeological Museum of Thessaloniki**, March 2015.
- **Editorial Board**, Art & Perception Journal, 2012-present.
- My research, jointly with Prof. S. Silverstein, was featured in “Rutgers Today”, the University’s weekly online magazine on May 9, 2013 {<http://www.youtube.com/watch?v=BKlpx50Avs>}
- Interviewed by the TV Channel Russia-2 (Россия-2) for the 52-minute program “5 Senses – Vision” (“5 чувств. Зрение”) on the hollow-mask and reverse-perspective illusions that aired in Russia in 2013 (https://www.youtube.com/watch?v=b_PIVPoC-JA&app=desktop).
- **Top-ten finalist**, 2012 Best Illusion of the Year international contest. • Featured on New Scientist’s web page (May 2012) <http://www.newscientist.com/blogs/nstv/2012/05/best-illusions-of-2012-the-exorcist-illusion.html>. • Also featured on Scientific American’s blog (June 2012). • Winner of Tom Troscianko Memorial Award at ECVF 2012. • Included in Scientific American Mind magazine, Jan/Feb 2013. <http://blogs.scientificamerican.com/symbiartic/2012/06/05/exorcist-illusion/>
- The animation sequences on my web site (<http://ruccs.rutgers.edu/~papathom/Movies/index.html>) were used for courses in Computer Graphics in the Defence Academy - College of Management and Technology, Shrivenham, UK in conjunction with Cranfield University
- **2nd place winner**, 2011 Best Supervisor of the Year, Rutgers University, April 12, 2011
- **Interviewed** by Christina Quaine for Stylist magazine (UK) January 19, 2011. Article in <http://www.scribd.com/doc/47988217/Untitled> & pp. 41-44 of <http://read.stylist.co.uk/issue/Jan31-2011>
- **Featured in Article** on perception and art for New Scientist Magazine, 2010 (Griggs, J. "Windows to the mind," New Scientist, September 18, 2010, 34-39).
- **Invited Article** on perception and art for Centurion Magazine, 2010
- **Invited Consultant** for National Geographic’s TV program “*Explorer: Inside LSD*”, 2009
- **Invited Judge**, 2009 Best Illusion of the Year international contest.
- **Winner, 2008 Best Illusion of the Year international contest (third place)**. Featured on New Scientist’s web page (April 2009) and Japanese TV programs on January 30 2010 "Sekaiichi Uketai Jyugyo" ("The Most Useful School in the World" - <http://www.ntv.co.jp/sekaju/>) and on October 4 2011 “Maximum Level” FujiTV; also featured in Goldstein’s *Sensation & Perception* text, 2009.
- **Consulting Editor** for the journal *Perception and Psychophysics*, 2008-2013.
- **National Public Radio** “Morning Edition” featured publication in *Neuron*, June 4, 2005.
- **Editorial Advisor**, *Νοησις (Cognition)*, Journal of Hellenic Society for Cognitive Sciences, 2005-present.
- **Elected Fellow** of the American Institute of Medical and Biological Engineering, 2004.
- **Invited consultant** for a television program on Salvador Dali and science (“The Dali dimension”) by Mediapro Corporation of Barcelona, Spain, June 2003.
- **Invited as banquet speaker** for the Conference on Human Vision and Electronic Imaging, 2003 by co-chairs, Prof. T. Pappas & Dr. B. Rogowitz.
- **Invited as an external consultant** to conduct the review of the Centre for Vision Research of York University in Toronto, 2001.
- **Invited by the Ministry of Education of Greece** to join a 4-member panel to review applications for graduate programs in biomedical sciences, November, 1997, also in 2001.
- **Invited Paper** on Image Processing, 9th Image and Multidimensional Signal Processing Workshop, IEEE

and the Society for Imaging Science and Technology, 1996.

- **Elected Senior Member** in the IEEE (Institute of Electrical & Electronics Engineers), 1996.
- **Editorial Board**, International Journal of Imaging Systems and Technology, 1993-present.
- **Who's Who in the World**, 1993, 1998 Editions.
- **Invited Paper** on Visualization Techniques, ACM SIGGRAPH 1988.
- **Best Paper of 1986**, IEEE Transactions on Industrial Electronics.
- **Sigma Xi**, the International Research Honor Society.
- **Tau Beta Pi**, Honor Society for Engineers.
- **Eta Kappa Nu**, Honorary Society for Electrical Engineers.
- **Valedictorian**, Bronx Community College (BCC), Associate in Arts Degree, 1969.
- **Awards** in Engineering Science and in Mathematics, BCC, 1969.
- **Full Scholarship**, Anglo-American Hellenic Bureau of Education, BCC & Columbia Univ., 1967-1969.

3. RUTGERS UNIVERSITY / RBHS POSITIONS

- Busch Campus Dean, 2008 – present; details are provided in Appendix B at the end of this document.
- Director, Graduate Program in Biomedical Engineering, Rutgers University 2002 – 2004; Associate Graduate Director, 2004 – 2007. Full member, 1989-present.
- Full member, Graduate Program in Psychology, Rutgers University, 1990-present.
- Full member, Graduate Program in Neuroscience, University of Medicine and Dentistry of NJ (RBHS).
- Fellow, University College, Rutgers University, 1990-1999
- Fellow, Douglass College, Rutgers University, 1999 - 2006

4. DOCUMENTED RECOGNITION

NOTE: In all categories, entries are cited in reverse chronological order

4.14. Vision Sciences Conference Public Lecture, “Vision Research: Artists Doing Science - Scientists Doing Art,” Dali Museum, Saint Petersburg, FL, May 17, 2014.

4.13. National Public Radio featured our *Neuron* article* on "Morning Edition Saturday" on June 4, 2005; Joe Palca of NPR interviewed co-author David Melcher. Please see related document at the end.

4.12. Letter by AIMBE President, dated January 15, 2004, to inform me that “the College of Fellows elected [me] a Fellow of the American Institute of Medical and Engineering... membership not to exceed 2% of the total number of individuals active in MBE.”

4.11. Research on three-dimensional representation selected for presentation at International Undergraduate Research Conference, Brazil, November 2001.

4.10. News article “In the mind’s eye,” in *Philadelphia Inquirer’s* Health & Science Section, on the 1997 exhibit (see item 14.7 in this vitae), and the *Rutgers Targum*, October 30, 1997.

4.9. Strong book reviews for *Early Vision and Beyond* (item 12.1.2 in this vitae) in 6 journals: *Science*, 1995, **270**, 1009-1010; *Optics and Photonics News*, December 1995; *Trends in Neuroscience*, 1996, **19**(3), 114-115; *Binocular Vision and Eye Muscle Surgery*, 1995, **10**(3); *Contemporary Psychology*, 1996, **41**(6); *Optische Fenomenen* (Dutch), May 1996.

4.8. Letter by IEEE President, dated October 2, 1996, to inform me that I “have been elevated to the grade of Senior Member in the IEEE (Institute of Electrical & Electronics Engineers). Only 8% of the over 320,000 IEEE members hold this grade.”

4.7. Unsolicited congratulatory letter by Dr. L. A. Shepp, editor of the *International Journal of Imaging Systems and Technology*, to my director, Dr. Julesz, dated August 1, 1996, about the high quality of my guest-edited volume on Computational Approaches to Perceptual Problems in Imaging, summer 1996 issue (see item 12.10.2 in this vitae).

4.6. Unsolicited congratulatory letter by Dr. R. W. Proctor, editor of *Behavior Research, Methods, Instruments and Computers*, dated October 4, 1994, for Papatomas, T.V. et al., 1995, (item 12.2.22 in this vitae), in which he calls it “one of the best that [he] has handled.”

4.5. News articles in *Rutgers Focus* (April 23, 1993) and *Bell Labs News* (February 9, 1993) about the visual exhibits that I helped create in the Liberty Science Center in New Jersey (see items 14.2-14.4 in this vitae).

4.4. Letters of appreciation from the Ontario Science Centre in Canada (dated March 6, 1991 and June 5, 1992), the Liberty Science Center in New Jersey (dated January 30, 1992), and Lightspeed Design Group (dated Jun 16, 1995) for contributing as a consultant to create science exhibits and shows and for donating my own exhibits (see items 14.2-14.6 in this vitae).

4.3. Unsolicited congratulatory letter by Dr. H. Christiansen, editor of *Computer Graphics*, dated August 23, 1988, for Papatomas, T.V. et al. invited paper, 1988 (item 12.2.7 in this vitae) in which he mentions that “[he is] impressed, more than with any other paper in the proceedings, with your extraordinary diligence in researching and reporting on the state of the art.”

4.2. News articles: 1) Joyce Draper, "Science: The Movie," *AT&T Bell Laboratories Proto Magazine on New Technologies*, no. 3, pp. 10-12, 1987; 2) “Animate software with new facilities,” *AT&T Technical Report*, May 1987. These article featured the work of Papatomas, Schiavone and Julesz on the computer animation of meteorological data (see item 12.2.7 in this vitae).

4.1. Best Paper Award for Papatomas, T.V., "On the stability of peak current-controlled converters: Analysis, simulation, and experiments," *IEEE Transactions on Industrial Electronics*, vol. IE-33.2, 176-184, May 1986 (item 12.2.3 in this vitae).

5. RESEARCH EXPERIENCE

5.5. UNIVERSITY OF ATHENS, ATHENS, GREECE

SABBATICAL LEAVE: Instruction and research January – June 2004

I spent a semester at the Department of Methodology, History and Theory of Science (M.I.Th.E.) in the University of Athens. Prof. Stella Vosniadou was my hostess. In addition to giving lectures, I advised students on perception research both at M.I.Th.E. and at the Perception and Action Group, in the Department of Neurology of the Aiginiteion Hospital in Athens National University, headed by Prof. Ioannis Evdokimidis.

5.4. NEC RESEARCH INSTITUTE, Princeton, New Jersey

SABBATICAL LEAVE: Basic and applied research July 1998 - June 1999

Research on interaction of top-down and bottom-up processes in perception with D. Jacobs, J. Oliensis & B. Tjan. Research and publications on content-based image retrieval with the research team of I.J. Cox.

5.3. RUTGERS UNIVERSITY, New Brunswick, New Jersey

BIOMEDICAL ENGINEERING AND VISION RESEARCH July 1989 - present

Professor, Department of Biomedical Engineering (Associate Prof., 1989-1996) and Director of the Laboratory of Vision Research (Assoc. Director 1989-2010). Studying the brain mechanisms that underlie the perception of visual motion, stereopsis, texture, and attention. I employ psychoanatomical techniques for investigating the structure of visual pathways in the brain, based on strategic experiments. I develop computational models, based on the results of these studies, whose performance agrees closely with human behavior. I form interdisciplinary teams with neurophysiologists to study biological neural mechanisms. Particular interests: The role of object- based attention in motion perception. Auditory-visual interactions under attention. The role of data-driven and schema-driven processes in perception. Developing a unified approach for studying the perception of motion, stereopsis, texture, and static-flow patterns. Applying visual psychophysics research to brain pathology, to image generation, processing and display, and to scientific visualization techniques.

5.2. AT&T BELL LABORATORIES, MURRAY HILL, NJ

VISION RESEARCH Aug. 1983 - Sept. 1989

Member of Technical Staff, Visual Perception Research Department. (Bela Julesz, Department Head): Research in human and machine perception, image processing, and scientific visualization techniques. Developed novel display methods, employing animation in true depth, for scientific visualization of data in meteorology, computer-aided tomography, fractal geometry and Very Large Scale Integration (VLSI) modeling. Designed a parallel pattern recognition algorithm on the Connection Machine. I set up a computer graphics laboratory for conducting experiments in human and machine vision, and for investigating new display techniques. Implemented a system for testing stereoscopic vision in ophthalmologist's office. Conducted experiments in human stereo and motion perception and created a new paradigm for studying motion in human and machine vision.

TECHNICAL SUPERVISOR

May 1982 - Aug. 1983

Supervisor of AC (Alternating Current) Control Systems Group: The group's charter was to engage in research and development in microprocessor-based instrumentation. I supervised a team of eight engineers responsible for analyzing, designing and implementing

microprocessor-based systems for monitoring and controlling AC reserve power plants. In addition to monitoring critical variables and alarms, the stored program had to optimize engine-alternator performance by utilizing system load characteristics.

MEMBER OF TECHNICAL STAFF

Aug. 1977 - May 1982

Member of Technical Staff. Research in and design of digitally controlled power systems, and computer simulation of electronic circuits. During the first two years I developed novel feedback schemes for power regulators and converters, and I devised new modeling techniques for studying the stability performance of digitally controlled electronic power systems, for which I received a U.S. patent (for details, see "Patents" below). During the third year I initiated a research project to study stored-program methods for automated monitoring and control of DC (Direct Current) power plants. In the last two years I designed and implemented the hardware and software for a multi-processor DC power plant controller, which incorporated an efficient energy-saving control algorithm. For this work I was granted two U.S. patents (see "Patents" below).

5.1. COLUMBIA UNIVERSITY, School of Engineering and Applied Science

RESEARCH ASSISTANT, Electrical Engineering & Computer Science Jan. 1974 - Dec. 1975

Research Assistant, Department of Electrical Engineering and Computer Science, Columbia University. I conducted research on the eigenvalue problem for large sparse systems and networks (Ph.D. thesis). The numerical algorithms I developed and implemented were applied to compute the poles and zeroes of complex networks.

RESEARCH ASSISTANT, Civil Engineering

May 1972 - Sept. 1972

Research Assistant in Civil Engineering, Columbia University. I constructed typical network models for the arteriolar and venular trees of the cat from medical data for blood flow simulation.

6. TEACHING & TEACHING EXPERIENCE

NOTE: During 2008-2017, my teaching load was reduced by 1 course/semester to compensate for serving as the Busch Campus Dean.

6.2. RUTGERS UNIVERSITY, School of Engineering, and Department of Psychology

PROFESSOR/ASSOCIATE PROFESSOR

July 1989 - present

Department of Biomedical Engineering (BME): I taught a course on Advanced Computer Engineering for seniors; I also taught a graduate course on Computer Applications in BME, and one on Advanced Brain Research, listed jointly as a course in Perception in the Department of Psychology. I taught the Senior Design course in BME from 2001 to 2008. Course advisor to several students from the BME Department, as well as from Electrical Engineering and Psychology, on independent studies and research projects. Proposed an undergraduate course on Sensory Processes, Mechanisms, and Computational Models.

- Attended a one-day workshop on Learning Assessment, directed by Drs Richard Keeling, offered by the Rutgers Teaching Excellence Center, March 3, 2009.
- Attended a full-week workshop on the Teaching Portfolio, taught by Prof. Peter Seldin, offered by the Rutgers Teaching Excellence Center, May 16-20 1994.

6.1. COLUMBIA UNIVERSITY, School of Engineering and Applied Science

ADJUNCT ASSISTANT PROFESSOR

Sept. 1977 - May 1983

Department of Electrical Engineering and Computer Science. I taught graduate sequences of

courses in network analysis, circuit design, and numerical methods & FORTRAN.

ASSOCIATE & PRECEPTOR

Jan. 1976 - May 1977

Department of Electrical Engineering and Computer Science. I taught courses in Electronics for non-electrical engineers and I initiated a "self-paced" course in FORTRAN. My FORTRAN lecture notes (with O. Wing) were published by the Department and were used in subsequent course offerings.

TEACHING ASSISTANT

Sept. 1972 - Dec. 1973

Department of Electrical Engineering and Computer Science: Tutorial classes and grading for courses in applied mathematics, circuit theory, electronics, and control systems.

PREP-SCHOOL MATH TEACHER

Sept. 1971 - June 1972

United Nations International School (U.N.I.S.), New York: I taught math to advanced 9th graders (vectors, matrices, exponentials, logarithms, inverse functions, etc.).

7. THESES AND POST-DOCTORAL SUPERVISION

7.1. POST-DOCTORAL SUPERVISION / COLLABORATION

7.1.11 Dr. Attila Farkas "Depth-Inversion Illusions: studying the role of bottom-up and top-down processes using physical and virtual faces and reverse perspectives", July 2014 – present.

7.1.10 Dr. Joshua Dobias, "Role of disparity and motion parallax in reverse perspective illusion; sensory-motor behavior under 3-D illusions", July 2011 – July 2014.

7.1.9 Dr. Brian Keane, "Visual perception of people with schizophrenia" supervised jointly with Prof. Stephen Silverstein of RBHS, October 2009 – July 2013.

7.1.8 Dr. Yu-Chin (Sunnia) Chai, "Binocular vision: stereopsis and binocular rivalry" January 2008 – December 2009.

7.1.7 Dr. Sharon Sally, "Spatial and temporal characteristics of attention in the auditory and visual modalities," January 2006 – August 2007.

7.1.6 Dr. Chia-huei Tseng, "Attention and motion perception," April 2004 – April 2006.

7.1.5 Dr. Erik Blaser, "Mechanisms for attention in visual perception," April 2000 – September 2002.

7.1.4 Dr. Zoltan Vidnyanszky, "Perceptual organization; binocular rivalry," April 1998 - May 2000.

7.1.3 Dr. Bosco Tjan, "Interaction of top-down and bottom-up processes in perception," during sabbatical leave, NEC Research Institute, Princeton, New Jersey, July 1998 - June 1999.

7.1.2 Dr. K. Morikawa, "Stereopsis, texture, and lightness perception" January 1996 - May 1999.

7.1.1 Dr. K.S. Ramanujan, "The role of collinearity in motion and in textural grouping."

Competitive post-doctoral fellowship, awarded for Sep 1994 - Aug 1995, following approval of our joint proposal by the Fight for Sight research division of Prevent Blindness America.

7.2 Ph.D. THESES

7.2.10 Ms. Jillian Nguyen, "Sensory-motor behavior: Vision for perception and for action," supervised jointly with Prof. Elizabeth Torres, July 2011 - 2015, Department of Neuroscience & Cell Biology, Ph.D. Thesis defended July 2, 2015.

- 7.2.9 Mr. Yuwen Zhang**, "An Algorithm Suitable For Online Identification Of Subthalamic Nucleus From Microelectrode Recording Data," (formerly advised by the late Prof. E. Tzanakou) Ph.D. Thesis defended Dec 20, 2012.
- 7.2.8 Ms. Xiaohua Zhuang**, "Excitatory and inhibitory influences of attention," Department of Psychology, September 2003 – 2010 (degree awarded January 2010).
- 7.2.7 Mr. Anshul Jain**, "Implicit influences of attention," Department of Biomedical Engineering, Ph.D., October 2008.
- 7.2.6 Mr. Ji Hong**, "Visual-auditory interactions: Experiments and quantitative models," Department of Biomedical Engineering, Ph.D., October 2005.
- 7.2.5 Ms. Wonyeong Sohn**, "Attentional modulation in the perception of bivectorial motion," Department of Psychology, Ph.D., October 2004.
- 7.2.4 Mr. Andrew D. Griffiths**, "Perceptual assumptions and projective distortions in a three-dimensional shape illusion," (with Prof. Q. Zaidi), Department of Psychology, January 1999.
- 7.2.3 Mr. Jong-Ho Nam**, "Measuring the up-front nonlinearity general to pattern vision," (with Prof. C. Chubb), Department of Psychology, October 1997.
- 7.2.2 Mr. James W. McGowan**, "Modeling visual motion mechanisms," (with Prof. C. Chubb), Department of Psychology, May 1997.
- 7.2.1 Mr. K.S. Ramanujan**, "Texture perception: Computational model and psychophysics", Ph.D. in Biomedical Engineering, September 1994.

7.3. M.S. THESES (all in Biomedical Engineering, unless stated otherwise)

- 7.3.8 Ms. Maria-Eleni Karakatsani**, "Cognitive Influences in the Perceptual Brain. Experiments and Computational Models for the Ames Window Illusion", M.S. in Biomedical Engineering, thesis defended April 23, 2013.
- 7.3.7 Mr. William G. Thompson**, Advisor for non-thesis review on "Hierarchical Temporal Memory: A Theory of Neocortical Function," M.S. in Biomedical Engineering, December 2007.
- 7.3.6 Ms. Xiaohua Zhuang**, "A Motion Contrast Effect Induced by Feature-based Attention," Department of Psychology, M.S. thesis defended October 2005.
- 7.3.5 Ms. Ming Yang**, "Interaction of color and luminance in human stereopsis," 1996.
- 7.3.4 Ms. Amy Rosenthal**, "Computational models for Fourier and non-Fourier motion," 1996.
- 7.3.3 Ms. Pratima Bhoj-Kavde**, "Shape description of contours: A combination of Fourier and wavelet methods," with Prof. R. Nowakowski, 1993.
- 7.3.2 Dr. R. Chronister**, "Evaluation of stereopsis and motion perception in cerebral thrombosis," 1993.
- 7.3.1 Mr. K.S. Ramanujan**, "Shape averaging of biological objects," with Prof. R. Nowakowski, 1991.

7.4. HONORS THESES

- 7.4.4 Mr. Vanja Vljajnic**, "The Visual Perception of Faces and Scenes: The Roles of Motion Parallax and Binocular Disparity in Depth-Inversion Illusions," Honors Thesis, Dept. of Psychology, May 2013.
- 7.4.3 Ms. Idimma (Cherish) Madu**, Honors Senior Thesis in Psychology, 12:830:497, Fall 2009 and 12:830:498, Spring 2010; her thesis won the Marilyn Shaw Award for showing the most research

promise.

7.4.2 Aleksandra Sherman, undergraduate: “Recognition of images, melodies and sentences,” Spring 2009, 01:090:494: 01, Honors Interdisciplinary Thesis. Won Henry Rutgers Scholars Award (\$1,000) and featured in *Focus* (online magazine) <http://news.rutgers.edu/focus/issue.2009-04-20.2044885109/article.2009-04-21.6020015443> (this web page is no longer in service).

7.4.1 Mr. David McCabe (undergraduate Psychology student) Henry Rutgers Scholars Thesis. Research projects on the spatial resolution in motion perception, 2001-2002 (graduated with Honors).

8. PROFESSIONAL MEMBERSHIP

- **Fellow, AIMBE** (American Institute of Medical and Biological Engineering)
- **Senior Member, IEEE** (Institute of Electrical and Electronics Engineers)
- **AAAS** (American Association for the Advancement of Science)
- **Hellenic Society For The Cognitive Sciences**, founding member, 2004.
- **BBS** (Behavioral and Brain Sciences)
- **ACM** (Association of Computer Machinery)
- **OSA** (Optical Society of America)
- **SPIE** (Society of Photo-Optical Instrumentation Engineers)
- **ARVO** (Association for Research in Vision and Ophthalmology)
- **VSS** (Vision Sciences Society)
- **LIA** (Laser Institute of America)
- New York Academy of Sciences

9. PROFESSIONAL ACTIVITIES – HONORS

- **Chaired Session on 3-D Perception and reviewed abstracts**, invited by Prof. B. Pinna, organizer of 2012 European Conference on Visual Perception (ECVP), Alghero, Sardinia, Italy.
- Chief Organizer of the Julesz Lecture Series in memory of Prof. Bela Julesz:
 - inaugural Julesz Lecture by Dr. N. Logothetis (Director, Max Planck Institute), April 2011;
 - 2nd Julesz Lecture by Prof. Richard Anderson (Caltech), April 2013;
 - 3rd Julesz Lecture by Prof. V.S. Ramachandran (UC San Diego) February 2014;
 - co-organizer (with Prof. E. Kowler) of 4th Julesz Lecture by Prof. Jack Gallant (UC Berkeley) April 2017.
- Nominated as Undergraduate Research Mentor of the Year, 2008, 2010.
- Coordinated efforts with Prof. Wise Young and Suzanne Delehanty (Zimmerli Museum Director) to nominate artist Chuck Close for an Honorary Degree in Fall 2009.
- **Chaired Session on Objects and Shapes and Reviewer of abstracts**, invited by Prof. R. van Ee, organizer of 2008 European Conference on Visual Perception (ECVP), Utrecht, the Netherlands.
- **Session Chair and speaker for closing plenary talk**, invited by Prof. Yuri Shelepin, organizer of ECVP 2006. Symposium on Art, Imagination and Computing, European Conference on Visual Perception (ECVP), St. Petersburg, Russia.

- **Editorial Advisor**, *Νοησις (Cognition)*, Journal of the Hellenic Society for the Cognitive Sciences, 2005-present.
- **Organizer of memorial service** for B. Julesz, held at Rutgers's Kirkpatrick Chapel on May 7, 2004. Eighty colleagues (from as far as California and Toronto) and administrators (including President McCormick) paid tribute to the late Prof. Julesz.
- **Organizer of one-day Symposium** on the occasion of B. Julesz' retirement, held at Rutgers on March 24, 2001, with four internationally recognized speakers (K. Nakayama, J. Victor, R. von der Heydt, D. Regan).
- **Guest Editor**, Special Issue of International Journal of Imaging Systems and Technology on Computational Approaches to Perceptual Problems in Imaging, summer 1996 issue.
- **Invited lecturer** for 1996 NEC Research Conference, Princeton, New Jersey, June 1996.
- **Invited lecturer** for Plenary Session, 9th Image and Multidimensional Signal Processing Workshop, organized by the IEEE Signal Processing Society and the Society for Imaging Science and Technology, held at Belize, March 3-6, 1996.
- **Member of Conference Organizing Committee**, Human Vision and Electronic Imaging, IS&T/SPIE Symposium on Electronic Imaging: Science and Technology, 1996, 1997.
- **Organizer and Session Chair**, Biological Sensory Processes, 22nd Annual Northeast Bioengineering Conference, Prof. J. K-J Li, general chair, March 14-15, 1996.
- **Principal Organizer** of International Symposium in honor of B. Julesz, on "Linking psychophysics, neurophysiology and computational vision" (featured in Rutgers Focus newspaper, April 23, 1993), held at Rutgers on April 30-May 1, 1993, attended by over 200 scientists from all over the world (including Europe, Australia, and Japan). Proceedings published by MIT Press, Spring 1995.
- Program Committee, International Workshop on Perceptual Issues in Visualization, Int'l Federation for Information Processing (IFIP), San Jose, California, 23-24 Oct 1993.
- Moderator of ARVO 1992 session on *Texture, Space, Shape and Localization*, May 5, *Investigative Ophthalmology and Visual Science*, 33, 956-962, 1992.
- Reviewer of proposals for **NSF** (National Science Foundation), **AFOSR** (Air Force Office of Scientific Research), **Basic Research Foundation of Israel**.
- Reviewer of articles for *Nature* (since 1995), *The Visual Computer*, (since 1987), *Vision Research*, (since 1991), *Perception and Psychophysics*, (since 1991), *Biological Cybernetics*, (since 1989), *Proceedings of the National Academy of Sciences* (since 1992), *Journal of Visual Communication and Image Representation* (since 1990), *Psychonomics Bulletin & Review* (since 2006).
- Reviewer of book proposals for **Cambridge University Press** and **MIT Press**, 1995 - present
- Reviewer, B.S. Rubenstein's PhD thesis for the Weizmann Institute of Science, April 1994.
- Co-chair for KRIKOS Conference on Archaeology, Metropolitan Museum of Art, New York, October 30, 1988.
- Co-chair for KRIKOS Symposium on Artificial Intelligence, held at the National Technical University, Athens, Greece, May 17, 1986.
- Co-chair for KRIKOS Conference on Biotechnology, New York University Medical Center, New York, October 19, 1985.
- President of KRIKOS, Greek-American Scientific and Cultural Association, 1985-86; member of Board of Directors, 1983-1986; editor of Newsletter, 1982-1988.
- Program Committee, 26th International Symposium: Microcomputer Applications, New York, October 1984.
- Program Committee, 27th International Symposium: Microcomputers in Bioengineering, New York,

October 1984.

10. ADMINISTRATIVE/COMMUNITY ACTIVITIES

- Busch Campus Dean: Bringing faculty and undergraduate students together for research, academic, cultural and community-building events beyond the classroom, 2008 – present (please see **details in Appendix B** at the end of this document).
- Participated in **Rutgers Day** with the presentation “Stunning 3-D Visual Illusions” in the SERC Smart Class in 2009-2016.
- Participated with an exhibit in the Junior Science & Humanities Symposium, organized by the US Army, Navy & Air Force, March 24-25, 2014.
- Lecture to Upward Bound students, July 10, 2012.
- Attended SoE weekly Deans’ meetings Sept 2010 - Jan 2013
- Chief Organizer of theater play “Cavafy: The Poet of the City”, December 10, 2011.
- Member of the Internal Advisory Committee for the NSF-funded program “RU STEPed Up for Success”, chaired by Dr. Furmanski, Executive Vice President for Academic Affairs (2010-2012).
- Member of the Work Group (Residence Life) for Community Approaches to Suicide Prevention (CASP) Working Group (Fall 2010).
- Member of the Committee to discuss expanding the 1-credit Introduction to Research course for undergraduates into a 3-credit course (September 2010).
- Member of the Search Committee for RuCCS Director (2009-2010)
- LVR/RuCCS Laboratory demonstrations to President McCormick and Executive SAS Dean Doug Greenberg December 2, 2009.
- Member of the Senate (2008-2010); member of the Research and Graduate & Professional Education Committee (2009-2010)
- Member of the Executive Committee of the Modern Greek Studies Program at Rutgers University, chaired by Steve Reinert, 2009-present.
- Presented 2 lectures for the Douglass Science Institute (DSI), a four-year program for high school girls, who come to Douglass Campus for one week every summer to explore fields in math, science and engineering. DSI is a program run by the Douglass Project (July 2009).
- Member of the Rutgers/UMDNJ Graduate Admissions Implementation Team, Fall 2007/Spring 2008.
- Represented Rutgers and UMDNJ at the HBCU-UP (Historically Black Colleges and Universities - Undergraduate Program), sponsored by NSF and AAAS, in Washington, DC, October 2007, to recruit students for graduate programs and increase diversity.
- Member of Organizing Committee for Third Annual NJ Biomedical Engineering Showcase 2006, chaired by Prof. M. Yarmush (members from NJIT, UMDNJ, Stevens Institute of Technology, Princeton University, the Public Health Research Institute of NJ, the Biotechnology Council of NJ, the NJ Commission on Science and Technology, and the Health Care Institute of NJ).
- Faculty advisor to Hellenic Cultural Association (HCA) of Rutgers Students, 1990-1993, 2005-present. HCA organizes events to attract Greek-American Community and raise funds for Modern Greek Studies program at Rutgers (we raised **\$1,025,000** in the last **5 years**, of which \$800,000 were donated by a Rutgers alumnus friend).
- Mentor for junior faculty (Assistant Professor Anant Madabhushi), 2005-2011.
- Ombudsman for graduate BME students, 2005-present.
- Member of CAIP Scientific Advisory Board, 2005-2009.

- Member of Committee on Honorary Degrees for May 2006, 2007, 2009 appointed by President McCormick.
- Member of FASIP/FCP Peer Evaluation Committee, Dept. of Biomedical Engineering, 1992, 1993, 2005, 2006, 2008, 2009, 2010.
- Chair of Admissions Committee, Dept. of Biomedical Engineering, January 2004-January 2007.
- Member of BME Committee on Promotions, 2005, 2006.
- Graduate Program Director, Biomedical Engineering, 2002 - 2004.
- Member, Appointments and Promotions Committee, Rutgers School of Engineering, 2002-2003, 2005-2006, 2006-2007, 2009-2010.
- Member, Executive Council, Graduate School of Biomedical Sciences, University of Medicine & Dentistry of New Jersey (UMDNJ), 2002- 2004.
- Member, Physical and Mathematical Sciences and Engineering Area Committee of the Graduate School-New Brunswick 2002-2004.
- Member of Cognitive Area Faculty, Graduate Program of Psychology, 1990 - present.
- Member of Executive Committee, Center for Cognitive Science, 1999 - present.
- Member of Committee on Imaging Technology, Dept. of Psychology, 1998 - present.
- Supervised undergraduate student S. Shah under Rutgers University's OMUSP Program (Office of Minority Undergraduate Science Programs), Summer 1996.
- Apprenticeship Sponsor for Rutgers University -Minority Apprenticeship Pre-college Program in Science (RU-MAPPS), Summer 1996.
- Lectured in Prof. E.F. Mappen's course 06:090:130, "Introduction to Scientific Research," under the Douglass Project for Rutgers Women in Math, Science and Engineering.
- Nonsalaried Consultant to President C.H. Howarth of Liberty Science Center and Hall of Technology in Liberty Park, New Jersey, 1989-1993.
- Scientific Consultant, Laser Show on the Brain, Liberty Science Center, Liberty Park, NJ, 1994-1995.
- University Senator, Spring 1995 term.
- College of Engineering Committee on the Campus Environment, 1994-1995.
- Member of Planning Committee for Human and Computer Vision Talk Series, now under the name Perceptual Science Talk Series, 1994-present, representative from BME.
- Internship Sponsor/Mentor for Douglass College's Project for Rutgers Women in Math, Project SUPER (Stepping Up in Physical Sciences, Engineering & Research), Spring 1995, 1996; also summer internship mentor under the SUPER program, 1995, 1996, 1998.
- Representative of Biomedical Engineering Department for establishing the Cognitive Science Certificate Program, Spring 1994.
- Host to students from the New Jersey Governor's School, a summer science program for gifted high-school students, July 1994, 1995, 2012.
- Keynote Lecture to Governor's School of Engineering and Technology, 2012, 2013, 2015
- Member of Admissions Committee, Dept. of Biomedical Engineering, 1990-1991, 1996-1997.
- Member of Fellowships Committee, Dept. of Biomedical Engineering, 1991-1993, 1996-1998.
- Member of Graduate Membership Committee, Dept. of Biomedical Engineering, 1994 -1997.
- Budget Coordinator, Laboratory of Vision Research, 1989-present.
- Lecturer at Summer Science Program for urban youths, Plainfield, NJ, 1988-2000.
- Member, Applied Science Committee, Rutgers School of Engineering, 1989-2006.
- Member, Library Committee, Rutgers School of Engineering, 1989-2005.
- Coordinator of seminar talks, Laboratory of Vision Research, 1989-present.
- Member of the Rutgers/UMDNJ Graduate Admissions Implementation Team, Fall 2007/Spring 2008.
- Three-year participation as member of Committee on Honorary Degrees for May 2007, 2008 and 2009, appointed by President McCormick.

- Member of Organizing Committee for Third Annual NJ Biomedical Engineering Showcase 2006, chaired by Prof. M. Yarmush (members from NJIT, UMDNJ, Stevens Institute of Technology, Princeton University, the Public Health Research Institute of NJ, the Biotechnology Council of NJ, the NJ Commission on Science and Technology, and the Health Care Institute of NJ).
- **Fellow**, Douglass College, Rutgers University, 1999 – 2006.

11. RESEARCH & TRAINING GRANTS

11.1. Research/Training Grants Obtained

- co-PI, NSF Robert Noyce Teacher Scholarship Program, “STEM for Education (STEM-E) Scholarship Program”, Evelyn H. Laffey (PI); other co-PI’s: Eugenia Etkina, Keith H. Weber, Mohan Kalelkar. Total funds granted \$1,125,938 for a 5-year period, 2011-2016.
- co-PI, NIMH 1R01MH093439-01: “Perceptual organization dysfunction as a biomarker of schizophrenia,” R01. 4/1/11-3/31/16. PI: S. Silverstein (RBHS); Total direct costs: \$1,604,512. Total costs: 2,446,259
- Senior Personnel in Prof. Stephen Hanson, PI “Acquisition of 3T MRI Scanner for Rutgers University” October 1, 2010 – September 30, 2011; total direct costs: \$1,850,000.
- Member, NSF IGERT: “Interdisciplinary training in perceptual science” PI: E. Kowler; Co-PI’s D. Metaxas, J. Feldman, D. Pai, M. Shiffrar; Participants: Knoblich, Pylyshyn, Singh, Stromswold, DeCarlo, Elgammal, Pavlovic, Shan, Stone, Dana, Meer, Paphomas, Cronk, 7/15/06-6/30/11, Total direct cost \$2,880,406
- Co-Investigator, National Institute for Psychobiology in Israel, “Visual Depth Based on Static and Dynamic Cues of 2D Displays: An Oculomotor Approach,” Prof. Michael Wagner. P.I., \$25,000/year, 2007-2009, \$50,000
- P.I., Training Grant for the Graduate Program of Biomedical Engineering, U.S. Department of Education GAANN Program (Graduate Assistance in Areas of National Need), “Training tomorrow's leaders in Biomedical Engineering” 3 years (July 2003 – June 2006), \$642,618 direct, \$170,200 matching. Total: \$812,818
- P.I., NIH Grant R01 EY 013758-01 awarded April 2002, "The role of object-based attention in motion perception", 4/1/02-3/31/05, (\$300,000 direct/\$166,500 indirect) \$466,500
- Member, Information Sciences Council grant "Vision-Equipped Agents for the Disabled", Sven Dickinson, P.I. one of 5 faculty on grant, 2/1/99- 6/30/00, \$30,470
- P.I., Grant from McDonnell-Pew Program in Cognitive Neuroscience for collaborative research with Eastern Europe, Jan 1, 1996 - Dec 31, 1999 \$ 86,070
“Spatial continuity, contour closure and skeletons: Psychophysical, physiological, and computational aspects of perceptual organization”
- P.I., Grant from McDonnell-Pew Program in Cognitive Neuroscience, July 1, 1994-June 30, 1996 \$ 57,951
“Neural pathways and mechanisms for motion perception: Psychophysics, physiology, and computational modeling”
- P.I., Grant from Fight For Sight Foundation to supervise post-doc student K.S. Ramanujan, Sept 1, 1994-Aug 31, 1995 \$ 14,000
“Collinearity in motion perception and texture grouping”

- P.I., Grant from AT&T Foundation for one year (1994-95) \$ 17,000
“Texture and color perception in image processing:
Experiments and computational models”
- P.I., NSF Grant BNS-9109384, Aug. 1, 1991 - Jan. 31, 1994 \$150,000
“The role of visual attributes in the perception of texture and motion”
- P.I., NSF Research Experiences for Undergraduates (REU), 1993-1994 \$ 5,000
“Graphics modules for displaying motion stimuli”
- P.I., NSF Research Experiences for Undergraduates (REU), 1992-1993 \$ 4,000
“Interactive experiments to study the perception of texture and motion”
- P.I., Matching Funds from Rutgers for above NSF REUs (1992-1994) \$ 3,000
“Motion: Perception and modeling”
- P.I., ONR Grant N00014-92-J-1312 Feb 1, 1992 - Jan. 31, 1993 \$ 19,965
“The role of visual attributes in texture and stereopsis”
- P.I., Grants for International Conference at Rutgers, April 30 & May 1, 1993 \$ 36,100
“Linking Psychophysics, Neurophysiology and Computational Vision”

11.2. Department And Center External Grants

- NIH Training Grant T32 NH 19975, "Visual Perception and Language", 7/1/98-6/30/03, one of 21 faculty on grant, (\$474,480 direct/30,358 indirect) \$504,838
- Whitaker Foundation's Leadership - Development Award to the Department of Biomedical Engineering. Participated actively in the proposal preparation efforts and in the site visits, 2002 – 2006 (P.I.: M. Yarmush) Total: \$5,000,000

11.3. Internal Grants

- Papathomas, T.V. (PI), Silverstein, S.M. (co-PI), Feigenson, K. (co-PI), RUBIC grant for study on “Using fMRI to determine networks underlying perceptual, cognitive, and behavioral organization,” approved for fMRI-scanning 10 subjects, June 27, 2012.
- Ppapathomas, T.V. (PI), V. Pavlovic (co-PI), A. Leslie (co-PI), Academic Excellence Fund Program, “3-D perception of faces and scenes: behavior, brain imaging, development and computation,” \$25,000 for AY 2009-2010.

11.4. Research Grants Administered

- I administered Prof. Chubb's NSF grant DBS92-03291 and co-supervised his four students during his two-year leave from Rutgers, August 8, 1994 - July 31, 1996.

11.5. Major Proposals Submitted / Under Review - Not Funded

- Co-PI with Prof. Steven Silverstein of Rutgers University to the NIMH, “Depth Illusions as Biomarkers of Psychosis Development, Recovery, and Relapse,” \$3,873,115 over 5 years, submitted October 2014.

Status: Under Revision.

- Co-PI with Prof. Nicholas Smyrnis of the University of Athens Medical School, to the Thalys Research Program in Greece, “New endophenotypes in the study of the pathological causes of schizophrenia,” submitted October 2010.

Status: Not funded.

- P.I., “Collaborative Proposal: Interaction of bottom-up and top-down information in 3D shape perception - Psychophysics and computational modeling”, to the NSF/NIH Collaborative Research in Computational Neuroscience (CRCNS) Program. Co-PIs: Vladimir Pavlovic, Rutgers Computer Science; Pawan Sinha, MIT, submitted November 17, 2009.
Status: Not funded.
- Co-PI with Dr. Deborah Aks, PI (co-PI's: Zenon Pylyshyn, Dimitris Metaxas, Vladimir Pavlovic, Thomas Pappathomas) “Studying the dynamics of object tracking” submitted to NSF December 9, 2008.
Status: Not funded.
- Co-PI with Prof. Kowler, NSF proposal “REU Site: Interdisciplinary Perceptual Science,” submitted November 2007, requesting \$427,879 in direct costs for 4 years (2008-2012).
Status: Not funded.
- P.I. “Neural decisions for perception and action in three dimensions”, Letter of Intent submitted April 4, 2007 to the Human Frontiers Science Program (HFSP) for a 5-year grant; direct costs \$450,000 per year. Co-investigators: Zoe Kourtzi, University of Birmingham, UK; Peter Janssen, Catholic University, Leuven, Belgium; Gonzalo G. de Polavieja, Universidad Autonoma de Madrid, Spain.
Status: Letter of intent placed at top 30% and considered for full application request; it was rejected in the second pass.
- P.I., “Brain Mechanisms for Processing Multi-Sensory Stimuli – New Approaches”, internal proposal submitted to the Rutgers Busch Biomedical Research Program for a 2-year grant; direct costs \$36,276.
Status: Not funded.
- Co-P.I., with Prof. Troy Shinbrot, Training Grant for the Graduate Program of Biomedical Engineering, submitted November 2006 to the U.S. Department of Education GAANN Program (Graduate Assistance in Areas of National Need), “Training tomorrow's leaders in Biomedical Engineering”, T. Shinbrot P.I., 3 years (July 2007 – June 2010), Total direct: \$475,000
Status: The application was rated at 90/100 (100 being best), but it was not funded.
- P.I., NIH/NEI proposal for R01 grant, submitted July 1, 2004, "Implicit attentional selection: Processes and mechanisms." 5 years (4/1/05-3/31/10), currently under revision. Total direct: \$1,250,000
Status: Not funded
- Proposal to recruit Distinguished Director of LVR, under the Rutgers University Capital Campaign, submitted November 2006.

12. PUBLICATIONS - INVITED TALKS

12.1. BOOKS

3. Re-published Bela Julesz’s classic *Foundations of Cyclopean Perception*, MIT Press, May 2006, with Prof. F. Phillips (Skidmore). The book was out of print, and it was a high demand, with used copies going for up to \$400. The book was included in the top 100 most influential books in Cognitive Science in the 20th century in a recent poll of the University of Minnesota Center for Cognitive Sciences. As a reviewer put it, “There is no book quite like it. I'd put it in the same general category as Helmholtz's book of optics.”

<http://mitpress.mit.edu/catalog/author/default.asp?aid=4878>

2. Papathomas, TV, Editor-in-chief, *Early Vision and Beyond*, (associate editors: C. Chubb, A. Gorea, E. Kowler), MIT Press, Cambridge, Massachusetts, 1995. The sold-out volume received favorable reviews in 6 journals, including a very strong review in *Science*.

<http://mitpress.mit.edu/catalog/author/default.asp?aid=4577>

1. Papathomas, TV, Bod, M.L. *Solution manual* for J. Millman's *Microelectronics: Digital and analog circuits and systems*, McGraw-Hill, New York, 190 pages, 1979.

12.2. REFEREED JOURNAL PAPERS

79. Wagner M., Ehrenstein W.H., Papathomas, T.V. “Visual search on 2-D and 2½-D surfaces: differential effects of writing direction on search performance and eye movement patterns,” (in preparation).

78. Papathomas T.V., Chai, Y-C, Zhuang, X. “Dominance of Sharp over Blurred Image Features in Interocular Grouping during ‘Patchwork’ Binocular Rivalry” (in preparation) to be submitted to *Multisensory Research*.

77. Keane B. P., Silverstein, S. M., Wang, Y., Roche, M. W., Papathomas T. V., “Seeing more clearly through psychosis: Depth inversion illusions are normal in bipolar disorder but reduced in schizophrenia,” *Schizophrenia Research*, 176 (2016) 485–492.

<http://doi.org/10.1016/j.schres.2016.06.015>

76. Pop LC, Sukumar D, Schneider SH, Schluskel Y, Gordon C, Wang X, Papathomas TV, Shapses SA, (2016) “Three doses of vitamin D (3DD) on bone mineral density (BMD) and geometry in older women during modest weight loss”, *Osteoporosis International*, August 4 2016, DOI 10.1007/s00198-016-3735-z.

75. Gupta T, Silverstein SM, Bernard JA, Keane BP, Papathomas TV, Pelletier-Baldelli A, Dean DJ, Newberry RE, Ristanovic I, Mittal, VA “Disruptions in neural connectivity associated with reduced susceptibility to a depth inversion illusion in youth at ultra high risk for psychosis.”, *Neuroimage Clinical* 2016 Oct 2, 12: 681-690, eCollection 2016.

74. Nguyen J, Majmudar U, Papathomas TV, Silverstein SM, Torres EB (2016) “Schizophrenia: The Micro-Movements Perspective”, *Neuropsychologia*, February 2016.

73. Dobias, J. J., Papathomas, T. V., & Vljajnic, V. M. (2016). Convexity bias and perspective cues in the reverse-perspective illusion. *i-Perception*, January-February 2016, pp. 1-7.

72. Dobias JJ, Papathomas TV, Sarwate, A “Ponzo’s Illusion in 3D: Perspective Gradients Dominate Differences in Retinal Size”, *Multisensory Research*, 29 (4-5), 421-438, 2016.

<http://booksandjournals.brillonline.com/content/journals/22134808/advance>

71. Nguyen, J., Majmudar, U., Ravaliya, J. H., Papathomas, T. V., Torres, E. B., “Automatically characterizing sensory-motor patterns underlying reach-to-grasp movements on a physical depth inversion illusion”, accepted in *Frontiers in Human Neuroscience*, December 2015.

70. Feigenson, K., Hanson, C., Papathomas T.V., Silverstein, S., “A Functional MRI Index of Spatial Context Effects in Vision”, *Psychology*, vol. 6, No. 16, 2015.

69. EB Torres, R Isenhower, J Nguyen, C Whyatt, JI Nurnberger, JV Jose, S Silverstein, TV Papathomas, J Sage, J Cole, (2016) “Towards Precision Psychiatry: Statistical Platform for the Personalized Characterization of Natural Behaviors”, *Frontiers in Neurology*, section Movement Disorders, published Feb 2, 2016.

[http://journal.frontiersin.org/article/10.3389/fneur.2016.00008/full?utm_source=Email to authors &utm_medium=Email&utm_content=T1 11.5e1 author&utm_campaign=Email publication&field=&journalName=Frontiers in Neurology&id=165519](http://journal.frontiersin.org/article/10.3389/fneur.2016.00008/full?utm_source=Email%20to%20authors%20&utm_medium=Email&utm_content=T1_11.5e1_author&utm_campaign=Email_publication&field=&journalName=Frontiers%20in%20Neurology&id=165519)

- 68.** Zhuang, X. & Papathomas T.V. (2015) "Prior Entry for Feature-based Attention: Are Objects of the Attended Color Perceived Earlier?" *International Journal of Behavioral Research & Psychology*, 3(7), 140-146.
- 67.** Farkas A, Papathomas TV, Silverstein SM, Kourtev H, Papayanopoulos JF, "Dynamic 3-D computer graphics for designing a diagnostic tool for patients with schizophrenia", *The Visual Computer*, DOI 10.1007/s00371-015-1152-5, 2015.
- 66.** Silverstein, S., Keane, B.P., Papathomas T.V., Lathrop, K.L., Kourtev, H., Feigenson, K., Roche, M., Wang, Y., Mikkilineni, D., Paterno, D. "Processing of Spatial-Frequency Altered Faces in Schizophrenia: Effects of Illness Phase and Duration", *PLoS ONE* 9(12): e114642. doi:10.1371/journal.pone.0114642.
- 65.** Dobias JJ & Papathomas TV (2014) "The role of linear perspective cues on the perceived depth magnitude of the surfaces they are painted on: Proper-, reverse- and flat-perspective paintings", *Perception*, 43, 989-1000.
- 64.** VM Vlajnic, TV Papathomas, BP Keane, A Zalokostas, SM Silverstein (2014) "What's in a face? The role of depth undulations in three-dimensional depth inversion illusions", *Perception*, **43**, 381-394.
- 63.** Nguyen, J., Papathomas, T. V., Ravaliya, J. H., Torres, E. B. Methods to Explore the Influence of Top-down Visual Processes on Motor Behavior. *J. Vis. Exp.* (86), e51422, doi:10.3791/51422 (2014).
- 62.** Dobias JJ & Papathomas TV (2013) "Recovering 3-D shape: Roles of absolute and relative disparity, retinal size, and viewing distance as studied with reverse-perspective stimuli," *Perception*, 42(4):430-446.
- 61.** Silverstein SM, Keane BP, Wang Y, Mikkilineni D, Paterno D, Papathomas TV, Keith Feigenson K (2013) "Effects of Short-Term Inpatient Treatment on Sensitivity to a Size Contrast Illusion in First-Episode Psychosis and Multiple-Episode Schizophrenia", *Frontiers in Psychopathology*, 4, 466.
- 60.** Keane B. P., Silverstein, S. M., Wang, Y., Papathomas T. V., (2013) "Reduced depth inversion illusions in schizophrenia are state-specific and occur for multiple object types and viewing conditions," *Journal of Abnormal Psychology*, 122(2), 506-512.
- 59.** Keane BP, Lu H, Papathomas TV, Silverstein SM, Kellman PJ (2013) Reinterpreting Behavioral Receptive Fields: Surface filling-in alters visually completed shape. *PLOS ONE* 8(6): e62505. doi:10.1371/journal.pone.0062505
- 58.** Keane B. P., Kellman P. J., Lu H., & Papathomas T. V., & Silverstein, S. M. "Is interpolation cognitively encapsulated? Measuring the effects of belief on Kanizsa shape discrimination and illusory contour formation," *Cognition* 2012, 123, 404-418.
- 57.** Papathomas T V, de Heer M, Zhuang X, Grace T, Bunkin R, 2012, "'Exorcist illusion': Twisting necks in the hollow-face and hollow-torso illusions" *i-Perception* **3**(10) 778–782.
- 56.** Papathomas. T. V., Baker, N., Yeshua, A. S., Zhuang, X., Ng, A. (2012). The ingenious Mr. Hughes: Combining forced, flat and reverse perspective all in one art piece to pit objects against surfaces. *i-Perception* 3(3), 182–185.
- 55.** Kim, S-H & Papathomas TV, (2011) "Non-rigid illusory motion in depth induced by translational motion of static images," *iPerception*, 2, 154 – 158.
- 54.** Zhuang, X. & Papathomas T.V. "Cue-relevance effects in conjunctive visual search: Cueing for location, color and orientation," *Journal of Vision*, June 8, 2011 11(7): 6; doi:10.1167/11.7.6.
- 53.** Sherman A., Papathomas T.V., Jain A. & Keane B. P. "The roles of perspective, angle polarity, stereo and motion parallax in perceiving 3D objects," *Seeing and Perceiving*, 2011, **25**, 263-285.

- 52.** Papathomas, T.V., Kourtzi, Z., Welchman, A. E. (2010). Perspective-based illusory movement in a flat billboard—an explanation. *Perception*, 39(8), 1086 - 1093.
- 51.** Tseng C-H, Vidnyanszky Z, Papathomas TV, Sperling G, “Attention-based long-lasting sensitization and suppression of colors,” *Vision Research*, 2010, 50(4):416-423.
- 50.** Sally, S., Vidnyánszky, Z., Papathomas, T. V. “Feature-based attentional modulation increases with stimulus separation in divided-attention tasks.” *Spatial Vision*, 2009; **22**(6), 529-253.
- 49.** Wagner, M., Ehrenstein, W. H., Papathomas, T.V. (2008). “Vergence in reverspective: Percept-driven versus data-driven eye movement control”, *Neuroscience Letters*, **449**, 142-146.
- 48.** Jain, A., Sally, S., Papathomas, T.V. (2008). Audiovisual short-term influences and aftereffects in motion: Examination across three sets of directional pairings, *Journal of Vision*, **8**(15), 1-13; <http://www.journalofvision.org/8/15/7/>
- 47.** Papathomas TV. “Art pieces that ‘move’ in our minds – An explanation of illusory motion based on depth reversal,” *Spatial Vision*, **21**, 79-95, 2007.
- 46.** Hong, J, Papathomas TV. ”Influences of attention on auditory aftereffects following purely visual adaptation,” *Spatial Vision*, **19**(6), 567-580, 2006.
- 45.** Sohn W, Chong SC, Papathomas TV, Vidnyanszky Z. “Cross-feature spread of global attentional modulation in human area MT+”, *Neuroreport*, **16**, 1389-1393, 2005.
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- 43.** Blaser E, Papathomas TV, Vidnyanszky Z. “Binding of visual motion and color is early and automatic,” *European Journal of Neuroscience*, **21**, 2140-2144, 2005.
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- 39.** Papathomas TV. “Experiments on the role of pictorial cues in Hughes’ reverspectives,” *Perception*, **31**(5), 521-530, 2002.
- 38.** Vidnyanszky Z, Blaser E, Papathomas TV. “Motion integration during motion aftereffects,” *Trends in Cognitive Science*, **6**(4), 157-161, 2002.
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- 36.** Papathomas TV, Cox, IJ, Yianilos, PN, Miller ML, Minka TP, Conway TE, Ghosn J. "Psychophysical Experiments on the PicHunter image retrieval system," invited by guest editors B. Rogowitz & T. Pappas, selected among the best presented in the last 10 years in the SPIE conference, special issue of the *Journal of Electronic Imaging*, vol. **10**, pp. 170-180, 2001.
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- 33.** Papathomas TV. “Is perception of 3-D surface configurations cognitively penetrable?” *Behavioral*

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- 31.** Papathomas TV, Morikawa K. "A new stereoscopic illusion: Eyes popping out and sinking in," *Perception*, **27**, 627-629, 1998.
- 30.** Papathomas TV, Kashi RS, Gorea A. "A human vision based computational model for chromatic texture segregation," *IEEE Transactions on Systems, Man & Cybernetics--Part B: Cybernetics*, **27**(3), 428-440, 1997.
- 29.** Foran D, Meer P, Papathomas TV, Marsic I. "Compression guidelines for diagnostic telepathology," *IEEE Transactions on Information Technology in Biomedicine*, vol. **1**, 55-60, 1996.
- 28.** Kovács I, Papathomas TV, Fehér A, Yang M. "When the brain changes its mind: Interocular grouping during binocular rivalry," *Proceedings of the National Academy of Sciences USA*, **93**, 15508-15511, 1996.
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14. Gorea A, Papathomas TV. "Texture segregation by chromatic and achromatic visual pathways: an analogy with motion processing," *Jour. of the Optical Soc. of America A*, vol. **8**, No. 2, 386-393, 1991.
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12. Schiavone JA, Papathomas TV. "Visualizing meteorological data," *Bulletin of the American Meteorological Society*, vol. **71**, No. 7, 1012-1020, 1990.
11. Papathomas TV, Julesz B. "Stereoscopic illusion based on the proximity principle," *Perception*, vol. **18**, 589-594, 1989.
10. Papathomas TV, Kitsopoulos SC, Helfman JI. "Arrows-Anchors: Figure-ground reversals," *Perception*, vol. **18**, p. 689, 1989.
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3. Papathomas TV "An explanation of the half-moon illusion," in preparation, to be submitted to *Spatial Vision*.
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- 41.** Papathomas, T.V., “Masks and reverspectives: ambiguity in depth inversion illusions,” Conference on Pictorial Illusions, School of Advanced Study, University of London, May 23-24, 2013.
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- 140.** Papathomas T.V., Grace T., Farkas A., Kapadia A., Vlajnic V., Lovoulos S., Echazarreta K., Papayanopoulos J., Li Y. (2017) "Depth-Inversion 'Easillusions' and 'Hardillusions': Differences for Scenes and Faces," Visual Sciences Society Conference, St. Petersburg, FL.
- 139.** Farkas A., Papayanopoulos J., Papathomas T.V. (2017) "Customizing mirror-prism haploscopes for viewers' interpupillary distance using 3D-printed adjustments," Vision Sciences Society Conference, St. Petersburg, FL.

- 138.** Keane BP, Paterno D, Papathomas TV, Silverstein SM (2017), “Visual Acuity Differences within the Normal Range Strongly Alter Visual perception: A Cautionary Tale for Schizophrenia Research”, 16th International Congress on Schizophrenia Research, San Diego, California.
- 137.** M. Roche, B.P. Keane, S. Kastner, T. V. Papathomas, S. Silverstein (2016), “Visual acuity differences within the normal range strongly alter visual perception: A cautionary tale for studies of special populations,” Vision Sciences Society Conference, St. Petersburg, FL.
- 136.** Papathomas TV, Farkas A, (2016), “Painted features transform the shape of 3-D surfaces they are painted on – the case of faces,” European Conference on Visual Perception, Barcelona, Spain.
- 135.** Farkas A, Papathomas TV, Silverstein SM, Papayanopoulos J (2016), “Using the kinetic-depth effect to decouple convexity bias and face-specific knowledge in the hollow-face illusion,” Vision Sciences Society Conference, St. Petersburg, FL.
- 134.** Nguyen, J., Silverstein, S.M., Papathomas, T.V. & Torres, E.B. (2015). “Sensory-motor control underpinnings of a baseline-pointing task in patients with schizophrenia and in neurotypical controls,” *Society for Neuroscience Annual Meeting*.
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- 110.** Keane, B.P., Kellman, P.J., Lu, H., & Papathomas, T.V., & Silverstein, S.M. (2012) Is interpolation cognitively encapsulated? Measuring the effects of belief on Kanizsa shape discrimination and illusory contour formation., Conference of Society for Philosophy and Psychology (June 21-24).
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- 18.** Ramanujan, K.S., Nowakowski, R.S. and Papathomas, T.V., "From biological objects to biological

structure: A method for generating an average shape," *2nd International Conference on Industrial and Applied Mathematics*, 1991, p. 173.

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12.7. TECHNICAL MEMORANDA AT BELL LABORATORIES

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- 8.** Papathomas, T.V. and Julesz, B., "Results from benchmark tests for the Connection Machine based on Lie germs and the Mandelbrot Set," *Bell Labs Techn. Memorandum* 11223-861014-03-TM, October 14, 1986.
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- 6.** Kropfl, W.J. & Papathomas, T.V., "Design and implementation of apparatus for random-dot correlograms on TV projection systems," *Bell Labs Techn. Mem.* 11228-840611-06, May 21, 1984.
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- 4.** Scuderi, R. and Papathomas, T.V., "Worth of a FIT, Reliability study", Bell Labs Technical Memorandum, case 35701-29, Sept. 15, 1980.
- 3.** T. Papathomas, "Theoretical and simulation results for the stability of peak-current controlled converters," Bell Labs Technical Memorandum 80-2425-1, April 17, 1980.
- 2.** Papathomas, T.V. and Sutton, J., "Instrumentation for feasibility study on automated administration of power plants," Bell Labs Technical Memorandum, case 202385000, Aug 20, 1979.
- 1.** Papathomas, T.V., "Benchmark comparison of some computing systems", Bell Labs Technical Memorandum, case 40492-2, Nov 29, 1977.

12.8. COURSE NOTES

Papathomas, T.V. and Wing, O., "Notes on Self-Paced FORTRAN," printed and sold to students through the Columbia University Bookstore, 1976-1980.

12.9. INVITED TALKS

- 76.** Papathomas, T.V. "Career path and current research projects", invited as keynote speaker in the ODASIS (Office for Diversity and Academic Success in the Sciences) High Achiever Workshop, Feb 17, 2017.
- 75.** Papathomas, T.V. "3-D Visual Illusions - Their Value in Vision Research", Science Fair, Black River Middle School of Chester, NJ., March 3, 2016.
- 74.** Papathomas, T.V. "How We See the World with Our Eyes and Brain," Second Westfield Senior Citizen Center, Westfield, NJ, November 17, 2015.
- 73.** Papathomas, T.V. "Depth-Inversion Illusions - Studies in the role of priors/biases in vision", University of Tuebingen, Germany, August 28, 2015.
- 72.** Papathomas, T.V. "Science and Art", Kastoria Chamber of Commerce (in Greek), Kastoria, Greece, March 15, 2015.
- 71.** Papathomas, T.V. "Science and Art", Archeological Museum of Thessaloniki (in Greek), Thessaloniki, Greece, March 7, 2015.

- 70.** Papathomas, T.V. “3-D visual illusions and pathologies - What they tell us about the brain”, Northern New Jersey Junior Science and Humanities Symposium, Busch Student Center, March 25, 2014,
- 69.** Papathomas, T.V. “Interactions between Science and Art”, Zimmerli Museum of Art at Rutgers University, New Brunswick, NJ, March 3, 2015.
- 68.** Invited panelist in panel discussion “The Great Deceiver - Pat-trick Hughes”, Flowers Gallery, New York, April 30, 2014.
- 67.** Papathomas, T.V. “Interactions of bottom-up and top-down processes in visual perception”, Rutgers Center for Cognitive Science "What is Cognitive Science?" Talk Series, Dec 4, 2014.
- 66.** Papathomas, T.V. **Vision Sciences Conference Public Lecture**, “Vision Research: Artists Doing Science - Scientists Doing Art,” Dali Museum, Saint Petersburg, FL, May 17, 2014.
- 65.** Papathomas, T.V. “Perceptual differences between schizophrenia patients and controls,” Meril/Sanofi Animal Health Care, North Brunswick, NJ, June 18, 2013.
- 64.** Papathomas, T.V. “Three-dimensional illusions - applications to schizophrenia research,” CCNY, Feb 19, 2013.
- 63.** Papathomas, T.V. “Depth across scale” served as Respondent for a roundtable discussion on “De-facing the Portrait”, Zimmerli Art Museum. May 2, 2012.
- 62.** Papathomas, T.V. “Making sense of the senses,” Rutgers University School of Arts and Sciences Honors Program, February 15, 2012.
- 61.** Papathomas, T.V. “Scary masks and other illusions,” RU Step-up for Success & Achievement in Math and Science (AIMS) Learning Community, April 14, 2010.
- 60.** Papathomas, T.V. “Top-down influences in perceiving the 3-D structure of faces and scenes,” New York University, December 3, 2009.
- 59.** Papathomas, T.V. “Illusions, the royal path to brain research,” to the new members of the Board of Trustees, Rutgers University, October 23, 2009.
- 58.** Papathomas, T.V. “Torn apart: Service and research at Rutgers,” Office of Undergraduate Education, Rutgers University, October 23, 2009.
- 57.** Papathomas, T.V. “Bottom-up and top-down processes in vision,” Douglass Science Institute for Women in Math, Science & Engineering, July 17 2009.
- 56.** Papathomas, T.V. “Top-down processes in perception under self motion - A simple model,” UCLA, April 15, 2008.
- 55.** Papathomas, T.V. “Top-down processes in perception under self motion - A simple model,” University of Southern California, April 14, 2008.
- 54.** Papathomas, T.V. “A simple model for the role of top-down processes in perceiving stationary and moving objects under self motion,” Department of Computer Science, Rutgers University, March 14, 2008.
- 53.** Papathomas, T.V. “An explanation of the half-moon illusion,” Cognitive Science Club, Rutgers University, November 14, 2007.
- 52.** Papathomas, T.V. “Illusory depth and motion of 3-D objects: Do we need top-down processes to explain the illusions?” Sarnoff Research Center, June 15, 2007.
- 51.** Papathomas, T.V. “Influences of attention on auditory aftereffects following purely visual adaptation,” Rutgers Talk Series on Perceptual Science, April 30, 2007.
- 50.** Papathomas, T.V. “Why do reverspectives move under self motion?” invited plenary talk at the Symposium on Art, Perception and Imagination, European Conference in Visual Perception, St. Petersburg, Russia, August 25, 2006.

- 49.** Papathomas, T.V. "Perceiving in three dimensions under egomotion," Miami University, Oxford, Ohio, November 18, 2005.
- 48.** Papathomas, T.V. "Illusions in the perception of three-dimensional space," Perception and Action Group, Department of Neurology, Aiginiteion Hospital, Athens National University, Greece, August 12, 2004.
- 47.** Papathomas, T.V. "The role of attention in perception: vision, audition, and interactions," Department of Methodology, History and Theory of Science, Athens National University, Greece, March 30, 2004.
- 46.** Papathomas, T.V. "Visual illusions: External and internal factors," Department of Methodology, History and Theory of Science, Athens National University, Greece, March 23, 2004.
- 45.** Papathomas, T.V. "Vision and the brain: Correlates between perception and structure," Symposium at Athens National University, Greece, March 16, 2004.
- 44.** Papathomas, T.V. "Bottom-up and top-down influences in perceiving 3-D stimuli," Symposium for Prof. D. M. Regan's retirement at York University in Toronto, June 2003.
- 43.** Papathomas, T.V. "Depth reversals with facial and non-facial stimuli," Vision Colloquium Series, Department of Brain and Cognitive Sciences, MIT, April 18, 2003.
- 42.** Papathomas, T.V. "Stages of rivalry: binocular, mono-stereo, ambiguous-figure, and depth-reversal rivalries. The role of top-down processes," invited talk, Perceptual Ambiguity and Binocular Rivalry Workshop, San Miniato, Italy, 2002.
- 41.** Papathomas, T.V. "Cognitive factors in reverse depth and motion percepts," Brown University, Providence, R.I. March 18, 2002.
- 40.** Papathomas, T.V. "Why do Hughes's reverspectives move?" joint talk with Patrick Hughes, Rutgers University, NJ, April 10, 2000.
- 39.** Papathomas, T.V. "Interaction of top-down and bottom-up mechanisms in vision - Case study: Hughes's reverspectives," invited lecture at CAIP Center for Advanced Information Processing, Rutgers University, NJ, April 6, 2000.
- 38.** Papathomas, T.V. "A tool for studying the interaction of top-down and bottom-up mechanisms: learning effects and inter-observers differences," invited lecture at Bell Laboratories, Murray Hill, NJ, March 22, 2000.
- 37.** Papathomas, T.V. "Illusory depth and motion percepts in Patrick Hughes's reverspectives," invited lecture at NEC Research Institute, Princeton, NJ, Feb 7, 2000.
- 36.** Papathomas, T.V. "Fourier and non-Fourier motion pathways," invited lecture at State University of New York, New York, October 7, 1999.
- 35.** Papathomas, T.V. "One common or separate motion pathways? Evidence from a universal equiluminance technique," invited lecture at Vanderbilt University, Nashville, Tennessee, April 27, 1999.
- 34.** Papathomas, T.V. "Cognitive penetrability of early vision," invited lecture at NEC Research Institute, Princeton, NJ, Nov 3, 1998.
- 33.** Papathomas, T.V. "Interaction between schema-driven and data-driven mechanisms in vision," invited lecture at NEC Research Institute, Princeton, NJ, Oct 3, 1998.
- 32.** Kovács, I., Papathomas, T.V. and Fehér, A. "When the brain changes its mind: normal and abnormal aspects of binocular rivalry," Annual Meeting of the McDonnell-Pew Program in Cognitive Neuroscience, June 1998, Montreal, Canada.
- 31.** Papathomas, T.V. "Psychoanatomy in vision: Cutting the brain without a knife," invited talk in Rutgers Center for Cognitive Science lecture series "What is Cognitive Science?" Rutgers University, October 17, 1996.

- 30.** Papathomas, T.V. "An efficient technique for assessing the relative sensitivities of 1st-order and 2nd-order motion: Theory and applications," invited lecture at Boston University, June 5, 1996.
- 29.** Papathomas, T.V. "The role of chromatic and luminance signals in texture segregation," invited lecture at NEC Research Institute, Princeton, NJ, May 7, 1996.
- 28.** Papathomas, T.V. "Color as a carrier of motion: Psychophysics, modeling, and image processing," invited lecture at Lucent Technologies Bell Labs, April 9, 1996.
- 27.** Papathomas, T.V. "Separate processing of monocular and cyclopean forms?" invited lecture at the Rutgers University Series on Human and Computer Vision, Sept 18, 1995.
- 26.** Papathomas, T.V. "Interaction of color and luminance in stereopsis," invited lecture at the University of Patras, Patras, Greece, August 11, 1995.
- 25.** Papathomas, T.V. "Toward an integrated model of biological motion perception," invited lecture at NEC Research Institute, Princeton, NJ, July 12, 1995.
- 24.** Papathomas, T.V. "1st-order and 2nd-order motion," invited lecture at Rutgers University, Newark Campus, May 8, 1995.
- 23.** Papathomas, T.V. "Psychophysical evidence for separate motion pathways," invited lecture at New York University, April 14, 1995.
- 22.** Papathomas, T.V. "Fourier and non-Fourier motion mechanisms: Experiments and computational models," invited lecture at AT&T Bell Labs, April 13, 1995.
- 21.** Papathomas, T.V. "Psychoanatomical studies on motion pathways in the visual system," invited lecture at the University of Pennsylvania, March 30, 1995.
- 20.** Papathomas, T.V. "A unified approach to the perception of motion, stereo, and static flow (Glass) patterns," Rutgers Series in Vision, November 11, 1994.
- 20.** Papathomas, T.V. "Experiments and models for 1st- and 2nd-order motion," invited lecture at the University of Patras, Patras, Greece, September 14, 1994.
- 19.** Papathomas, T.V. "Computational models for Fourier and non-Fourier motion mechanisms," invited lecture at Rene Descartes University, Paris, France, August 31, 1994.
- 18.** Papathomas, T.V. and Ramanujan, K.S., "Texture segregation model based on human performance", AT&T Bell Laboratories, August 4, 1994.
- 17.** Papathomas, T.V. "A computational model for motion mechanisms, incorporating chromatic and luminance inputs," invited lecture at the Nippon Electric Company (NEC) Research Institute, Princeton, N.J., March 19, 1993.
- 16.** Papathomas, T.V. "Visual motion mechanisms: The role of color and luminance," invited lecture in Neurobiology course 761-556, Dr. Robin Davis coordinator, Rutgers, Feb 17, 1993.
- 15.** Papathomas, T.V. "Two distinct visual motion mechanisms revealed by experiments with color and luminance," invited lecture in Biomedical Engineering Seminar Series, Dr. George Shoane coordinator, Rutgers University, March 1, 1993.
- 14.** Papathomas, T.V. and Gorea, A., "Texture segregation model illustrated with color, luminance and orientation defined stimuli," New York University, November 22, 1991.
- 13.** Papathomas, T.V., "Psychophysical experiments on motion and texture perception," University of Medicine and Dentistry of New Jersey, Piscataway, NJ, October 5, 1991.
- 12.** Papathomas, T.V., "A unified class of stimuli for the perception of motion, texture and depth," Bristol University, Bristol, England, July 10, 1991.
- 11.** Papathomas, T.V., "Multi-attribute stimuli for motion, texture and stereo perception," Rene Descartes University, Paris, France, July 1, 1991.
- 10.** Papathomas, T.V., "Perception of motion, texture and depth," Department of Psychology

Colloquium Series, Rutgers University, Piscataway, NJ, April 10, 1991.

9. Papathomas, T.V., "The role of visual attributes in the perception of motion, texture and depth," University of Massachusetts at Lowell, March 13, 1991.

8. Papathomas, T.V., "On motion and depth perception - random-dot autostereograms," Ontario Science Center, Toronto, Canada, March 4, 1991.

7. Papathomas, T.V., "Experiments and models in motion perception," Biomedical Engineering Seminar, Rutgers University, Piscataway, NJ, September 18, 1989.

6. Papathomas, T.V., "Human and machine vision," Morristown Science Center Tour at AT&T Bell Laboratories, November 7, 1987.

5. Papathomas, T.V., "Influence of color and orientation on perceived motion," AT&T Bell Laboratories, September 17, 1987.

4. Papathomas, T.V., "Computers and vision," KRIKOS Conference on Artificial Intelligence, University of Pennsylvania, Philadelphia, PA, May 17, 1986.

3. Papathomas, T.V., "From human vision to machine vision," KRIKOS Symposium on Artificial Intelligence, held at the National Technical University, Athens, Greece, November 28, 1986.

2. Papathomas, T.V., "Human/Machine visual interaction," Image Analysis and Vision Research Colloquium, AT&T Bell Laboratories, April 23, 1986.

1. Papathomas, T.V., "Analysis, simulation and modeling of switching converters," IEEE Section, Athens, Greece, January 9, 1981.

12.10. JOURNAL EDITORIALS, BIOGRAPHIES, COMMENTARIES

7. Papathomas, T.V. Commentary on April Gornik's color woodblock print "Charente," (1988), for the "Water" exhibit at the Jane Voorhees Zimmerli Art Museum, September 2010.

6. Griggs, J. (2010) "Windows to the mind," *New Scientist*, September 18, 2010, 34-39.

5. Papathomas, T.V. "Science of illusion," in Poulton, G. (2010) "The art of illusion," *Centurion Magazine*, January 2010, 37-40.

4. Papathomas, T.V. & Phillips, F. *Foreword* in Bela Julesz's book *Foundations of Cyclopean Perception*, MIT Press, 2006.

3. Papathomas, T.V. "Biographical Memoir for Bela Julesz," *American Philosophical Society Proceedings*, December 2005.

2. Papathomas, T.V., "Guest Editorial, Special Issue on Computational Approaches to Perceptual Problems in Imaging", *International Journal of Imaging Systems and Technology*, 7, 63-64, 1996.

1. Papathomas, T.V., "Binocular vision and stereopsis," in *Early Vision and Beyond*, Papathomas, T.V. editor-in-chief, (associate editors: C. Chubb, A. Gorea, E. Kowler), MIT Press, Cambridge, MA, pp. 1-3, 1995.

13. U.S. PATENTS

3. Ebert, H.K., Jr., Menkes, H.E., Papathomas, T.V. and Venkatram, C.R., "Option protocol arrangement for stored program rectifier controller," U.S. Patent #4,633,412, December 30, 1986.

2. Papathomas, T.V. and Scuderi, R. "Rectifier control system for a DC power plant system," U.S. Patent #4,451,773, May 29, 1984.

1. Boros, V.B., Giacobelli, J.N. and Papathomas, T.V., "Average current controlled switching regulator utilizing digital control techniques," U.S. Patent #4,309,650, January 5, 1982.

14. EXHIBITS IN SCIENCE MUSEUMS, SCIENCE MEETINGS, INTERNET

11. Papathomas, T.V. YouTube video on three-dimensional face visual illusion (<http://www.youtube.com/watch?v=0QgoX78q-0Y>) has had more than 515,000 visits.
10. Interviewed by Christina Kotlar, at the *Be Film Underground 3-D Film Festival* on April 30, 2009:
http://web.mac.com/christina.k/FilmFestivalreViews/Podcasts/Entries/2009/5/4_EPISODE_64_BE_FILM_Closing_Night_at_the_Film_Festival.html
9. Papathomas, T.V. "Bistable figure/ground reversing stimuli" Invited exhibit in "Perceptual Relativity," Science Museum at the Fleischmann Planetarium of the University of Nevada, Reno. Prof. Michael A. Webster, curator, 2007 (<http://www.osa-opn.org/Content/Departments/education.aspx>).
8. Papathomas, T.V. "Proper-/reverse-spectives – 'Paper-thin reality' ", selected for presentation at the Vision Sciences Conference Demo Night, May 8, 2007, Sarasota, FL.
7. Papathomas, T.V. & Gorea, A. "Now you see it, now you don't; or don't you?" Exhibit in "Thresholds: Limits of Perception", an exhibition of works by artists and scientists, New York Arts Biennial 1997, Eighth Floor Gallery, New York City, N.Y., October 14-25, 1997. Featured in the October 10, 1997 issue of the *Rutgers Focus*.
6. Papathomas, T.V. & Julesz, B., "Random-dot autostereogram, barrier-strip autostereography technique," on display at the Ontario Science Centre, Ontario, Canada, summer 1992 - present.
5. Papathomas, T.V., "Multiple-mirror system to exhibit stereo pairs," on display at the Liberty Science Center, Jersey City, NJ, installed January 1993 for permanent exhibit.
4. Papathomas, T.V., "Random-object stereogram," on display at the Liberty Science Center, Jersey City, NJ, installed January 1993 for permanent exhibit.
3. Papathomas, T.V. and Julesz, B., "Multiple-plane random-dot stereogram," on display at the Liberty Science Center, Jersey City, NJ, installed January 1993 for permanent exhibit.
2. Papathomas, T.V. and Julesz, B., "Chromatic random-dot autostereogram," on display at the Children's Museum of Manhattan, 1989-1991.
1. Gorea, A. & Papathomas, T.V., "ECVP 90 - Logo Couleur," displayed as the official logo of the 1990 European Conference on Visual Perception, Paris, France. The logo was issued in a limited series of 280 prints.

15. STUDENT RESEARCH/DESIGN PROJECTS

- **Sophia Lovoulos**, (High School sophomore) research in ability to engage volition in inverting the perceived depth of 3-D objects, summers 2016, 2017.
- **Yuan Li**, Computer Science Junior, programming 3-D models of faces and scenes, conducting experiments with human subjects, academic year 2016-2017.
- **Andres Alvarez**, Senior Design Project, Department of Biomedical Engineering, 2015-2016.
- **Benjamin Maas**, Senior Design Project, Department of Biomedical Engineering, 2015-2016.
- **Joseph Vero**, Senior Design Project, Department of Biomedical Engineering, 2015-2016.
- **Daniel Cai**, Senior Design Project, Department of Biomedical Engineering, 2015-2016.
- **Jason Krasnits**, CS undergraduate, design of 3D faces and objects (Summer 2015)
- **Alistair Kapadia** (High School sophomore), research in role of cognitive influences on perception of 3D objects and faces, summers 2015, 2016.

- **John Papayanopoulos**, (Georgia Tech undergraduate Mechanical Engineering student), research in design of 3D animations (Summers 2014, 2015)
- **Eriq Pettway**, Undergraduate in Work-study program, construction of physical stimuli, 2014-2016.
- **Ushma Majmudar**, BME junior, perspective gradients in scenes, Spring 2015.
- **Ron Falkowski**, Senior Design Project, Department of Biomedical Engineering, 2013-2014.
- **Siddhi Pathak**, Senior Design Project, Department of Biomedical Engineering, 2013-2014.
- **Rihab Sadik**, Senior Design Project, Department of Biomedical Engineering, 2013-2014.
- **Leo Kozachkov**, Physics undergraduate, human versus scrambled masks, Fall 2013.
- **Geetika Baghel**, undergraduate, SAS Cell Biology and Neuroscience, role of relative size in scene perception, academic year 2011-2012.
- **Jay Ravaliya**, Senior Design Project, Department of Biomedical Engineering, 2012-2013.
- **Chiu, Kenneth**, Senior Design Project, Department of Biomedical Engineering, 2012-2013.
- **Mark Theiler**, SoE Undergraduate in Work-study program, construction of physical stimuli, 2013-2014.
- **Jay Ravaliya**, undergraduate, Department of Biomedical Engineering, 2011-2012.
- **Anuja Sarwate**, BME freshman, projects on size constancy and convexity bias, 2012-2015.
- **Polina Yanovich**, Graduate student, SAS Computer Science, summer 2012
- **Arielle S. Yeshua**, undergraduate, SAS Psychology, research in role of perspective in depth inversion, Spring 2011, Fall 2012.
- **Daniel Moritz**, BME sophomore, role of shadows in scene perception, Fall 2011.
- **Upasana Natarajan**, Cognitive Neuroscience undergraduate, role of texture in faces, Spring 2011.
- **Nicholas Baker** (Johns Hopkins University undergraduate student), research in role of perspective in depth inversion and the Ames window illusion (Summers 2011, 2012)
- **Andrew Ng** (High School senior, part-time research, #2 National US chess champion for under 21), summers 2011, 2012.
- **Vanja Vlajnic**, Psychology Department undergraduate, projects on reverspectives and hollow masks, role of features in depth-inversion illusion, human versus alien faces, Fall 2009-Fall 2013.
- **Jordan Ash**, BME undergraduate, project on depth perception under self-motion, collaborating with James Hughes, Fall 2009 – Fall 2010.
- **Anna Zalokostas**, Psychology undergraduate, projects on perceptual differences between schizophrenia patients and healthy controls, 2010-2011.
- **Michael Marks** (University of Maryland undergraduate student), research in 3-D perception of faces and scenes (Summers 2008, 2009, 2010, 2011)
- **James Hughes**, Senior Design Project, “Cost Effective Head Tracking System for Implementation of Virtual Stimuli”, Department of Biomedical Engineering, 2010-2011.
- **Marek Gacki**, Senior Design Project, “Cost Effective Head Tracking System for Implementation of Virtual Stimuli”, Department of Biomedical Engineering, 2010-2011.
- **Philip Smith** (Marquette University senior) and **Dianna Rodriguez** (Rutgers undergraduate), research in comparing recognition of melodies, images and sentences in the presence of noise (Summer 2009)
- **James Hughes**, undergraduate Biomedical Engineering: project on depth perception, Summer 2009, 14:125:489 for Fall 2009, Special Problems in BME 14:125:492:P1 for Spring 2010, Independent Study in Psychology, 01:830:391:01 for Spring 2010.
- **Ms. Idimma (Cherish) Madu**, Research in Psychology, 12:830:495:01, Spring 2009.
- **Ms. Idimma (Cherish) Madu**, Research in Psychology, 12:830:495:01, Fall 2008.
- **Parth Sheth**, High School junior, research in 3-D perception, Summer 2008.
- **Babette Hammerling**, sophomore in the School of Environmental & Biological Sciences, Honors Research Tutorial, Fall 2008.
- **Aleksandra Sherman**, undergraduate: “Recognition of images, melodies and sentences” Fall 2008,

01:090:493: 01, Honors Interdisciplinary Thesis.

- **Anton Shcherbakov**, undergraduate: Summer 2008 project on the perception of auditory and visual stimuli, following Spring 2008 Byrne First-Year Seminar on Perceptual Science (01:090:101, section 51).
- **Mr. Murtaza Naqvi**, Special Problems in Biomedical Engineering, “Design of apparatus for auditory/visual experiments”, course 14:125:492, Spring 2008.
- **Ms. Aleksandra Sherman**, Research in Cognitive Science, “The role of angle polarity and perspective in perceiving 3-D objects”, course 01:185:495, Fall 2007.
- **Mr. Scott Selikoff**, Independent Study in Cognitive Science, “Auditory search: pitch direction, timbre, and conjunctions”, course 16:185:699, Fall 2007.
- **Mrs. Marina Malysheva**, Independent Study in Cognitive Science, “The role of color and luminance in conjunctive visual search”, course 16:185:699, Fall 2007.
- **Ms. Hirza Gonzales**, Senior Design Project, “Computer Aids to Treat Vertigo”, Department of Biomedical Engineering, Fall 2006 - Spring 2007.
- **Mr. Henry Uzochukwu**, Senior (Psychology major, CS minor), Department of Psychology, taking a 5-credit Research in Psychology course, 01:830:495, Fall 2005.
- **Mr. Mikhail Lapin and Ms. Becky Chase**, BME seniors, advisor in Senior Design project, course 14:125:402, Spring 2005.
- **Ms. Parizad Bilimoria** (undergraduate, Brandeis University, recommended to work with me by Prof. Robert Sekuler). Summer research internship under Brandeis’s program: The role of cognitive processes in three-dimensional shape representation, summer 2001.
- **Ms. Wonyeong Sohn** (grad. Psychology student) Ph.D. graduate: Independent research projects on the role of attention in the motion aftereffect, 2000-2004.
- **Ms. Lisa Bono** (undergraduate, Douglass) summer research internship under Program SUPER: “The role of cognitive processes in reverspectives,” 2000, 2001; her poster was selected for presentation in an international undergraduate research Conference, in Brazil, November 2001.
- **Ms. Manpreet Kaur**, graduate student in Department of Biomedical Engineering, "Computer-based control of rotary platform for experiments in object perception," Certificate in Cognitive Science, summer 1999.
- **Mr. John Szatmary** (undergraduate Electrical and Computer Engineering student): Projects on binocular rivalry, summer 1996 - 1998 (with I. Kovács).
- **Ms. Amy Rosenthal** (grad. Biomed. Eng. student) Doctoral candidate: Independent research projects on computational models of motion mechanisms in the brain, Spring 1994 - 1996 (also advisor for M.S. thesis, defended July 1996).
- **Mr. James W. McGowan** (grad. Psychology student) Doctoral candidate: Independent research projects on Fourier and non-Fourier motion mechanisms, 1994-1996.
- **Ms. Ming Yang** (grad. Biomed. Eng. student): Independent research projects on chromatic and luminance stereopsis mechanisms in the brain (advisor for M.S. thesis, defended April, 1996).
- **Ms. Ebony Brooks** (undergraduate. Douglass College student) Summer research internship under Program SUPER: Influences of global structure on lightness induction, summer 1996.
- **Ms. Sejal Shah** (undergraduate. NJIT) Summer internship under OMUSP (Office of Minority Undergraduate Science Programs): Searching through pictorial databases, summer 1996.
- **Ms. Tiffany Conway** (undergraduate, Douglass) Summer research internship under Program SUPER: The role of selective attention in texture segregation, summers 1995, 1996, 1997; won a Douglass College Summer Research Stipend of \$1,000 for the project of 1997.
- **Dr. K.S. Ramanujan** Primary advisor for post-doctoral training, "The role of collinearity in motion and in textural grouping." This competitive post-doctoral fellowship was awarded for a year (Sep 1994

- Aug 1995), following approval of our joint proposal by the Fight for Sight research division of Prevent Blindness America.

- **Co-supervised Prof. C. Chubb's students** during his two-year leave (1994-1996) from the Dept. of Psychology at Rutgers: 1) Andrew Griffiths, Ph.D. candidate 2) Three M.S. candidates (James W. McGowan, Jong-Ho Nam, Jae-Hoon Cheong).
- **Mr. Edward Z. Chen** (undergraduate. Biochem. Eng. student) Worked with me under a Research Experience for Undergraduates (REU) award from NSF (summer 1993).
- **Mr. Orlando Lopez** (undergraduate. Electr. & Comput. Eng. student) Worked with me under a Research Experience for Undergraduates (REU) award from NSF (summer 1992).
- **Ms. Junqing Huang** (grad. Biomed. Eng. student) Worked with me on research projects in human vision (Jan. 1992-June 1993).
- **Mr. K.S. Ramanujan** (grad. Biomed. Eng. student) Defended his Ph.D. thesis with me, in September 1994, on texture and motion perception and modeling (Sept 1991-Sept 1994).
- **Mr. R. Chronister, M.D.** (grad. Biomed. Eng. student) Master's Thesis: Systematic study of deficiencies in visual perception in neuropathological cases (May 1990-Dec 1993).
- **Ms. Pratima Bhoj-Kavde**, (grad. Biomed. Eng. student) Independent research project, co-sponsored by Prof. R. Nowakowski of the University of Medicine and Dentistry of NJ on shape averaging of biological objects using wavelets (April 1991-May 1993).
- **Mr. K.S. Ramanujan** (grad. Biomed. Eng. student) Independent research project, co-sponsored by Prof. R. Nowakowski of the University of Medicine and Dentistry of NJ on the differences in shape of the corpus callosum in males/females and right-/left-handed persons (April 1990-May 1991).
- **Ms. Judy Flannery** (undergraduate. Psych. student) Independent research project on the role of color and orientation in texture processing (Jan.-Dec 1991).
- **Ms. Stacey Hawkins** (grad. Biomed. Eng. student) Independent research project on the role of color and orientation in texture processing (Jan.-May 1990).
- In the summers of 1986, 1987, and 1989 I sponsored and supervised independent research projects under the Summer Research Program (SRP) of Bell Laboratories.
 - 1986: **Sarah Chodrow** worked on displaying VLSI data (see Publications).
 - 1987: **Bill Etienne** worked on displaying computer-aided tomographic image data.
 - 1989: **Krishna McCay** conducted experiments for a motion image coder.

16. MEMBERSHIP IN THESIS AND POST-DOC COMMITTEES

- Jocelyn Mitchell - De Pew, "Complex and color pattern visual evoked potentials in controls and multiple sclerosis patients" (Prof. Tzanakou), Ph.D. May 1990.
- Tim Dasey, "Unsupervised global optimization in the formation of a neural network: Application to the classification of handwritten digits and visual evoked potentials," (Prof. Tzanakou), Ph.D., October 1991.
- George Kontaxakis, "A simulation study of the expectation-maximization algorithm for image reconstruction in positron emission tomography," (Prof. Tzanakos), M.S., October 1992.
- Sotiris Pavlopoulos, "Design and performance evaluation of a high-resolution small-animal PET scanner using Monte Carlo techniques," (Prof. Tzanakos), Ph.D., Oct 1992.
- Scott Marchese "An evaluation of reconstruction methods for time-of-flight assisted positron emission tomography," (Prof. Tzanakos), M.S. 1992.
- Nicholas Cottaris "Multi-neuronal studies in the optic tectum of the frog, *rana pipiens*," (Prof. Tzanakou), M.S., May 1992.

- Paul DeCosta, "A robust procedure for the analysis of images of networks," (Prof. Dunn), M.S., 1992.
- John Tardy, "X-ray image standardization by 3D projective invariants," (Prof. Dunn), M.S., 1992.
- Edward Ciaccio "Representation and comparison of sample distributions for biomedical signal pattern recognition", (Prof. Dunn), Ph.D., October 1993.
- John Ostuni "Use of registration potential in transmission image registration", (Prof. Dunn), Ph.D., October 1993.
- Elizabeth Fisher, "Registration of 3D surfaces from structured light images", (Prof. Dunn), Ph.D., proposal October 19, 1993.
- Francis Phan, "Speaker identification through wavelet multiresolution decomposition and alopex," (Prof. Tzanakou), M.S., April 1994.
- Reviewer of B.S. Rubenstein's Ph.D. thesis for the Weizmann Institute of Science, April 1994. Title: "Image gradients and performance asymmetries in early vision."
- Stacey Hawkins-Gwydir, "Non-rigid motion analysis of the growth cone using deformable contours," (Prof. Dunn), Ph.D., April 1994.
- Reates K. Curry, "Human visual processing for machine vision," (Profs. Wilder & Shoane), Ph.D., October 1994.
- Junqing Huang, "A procedure for automatic 3-D reconstruction of network structured microscopy," (Prof. Dunn), M.S., Dec 5, 1994.
- James W. McGowan, "Modeling a Second Texture-Defined Motion Channel", (Prof. Chubb, Psychology), M.S., April 1995.
- Jae-Hoon Cheong, "Mechanisms for second order motion defined by texture contrast and by texture flicker rate," (Prof. Chubb, Psychology), M.S., April 1995.
- Jong-Ho Nam, "Two independent mechanisms mediate discrimination of IID textures varying in mean luminance and contrast," (Prof. Chubb, Psychology), M.S., April 1995.
- George Kontaxakis, "Maximum likelihood image reconstruction in positron emission tomography: Convergence characteristics and stopping rules," (Prof. Tzanakos), Ph.D., Oct.1995.
- Alex Kononov, "SPIN theory and the indeterminate scale problem," (Prof. Hadani, Psychology), M.S., December 1995.
- Scott A. Adler, "Selective integration of perceptual information in infant memory," (Prof. Rovee-Collier, Psychology), Ph.D., October 1995.
- Jonathon Phillips ""Representation and registration in face recognition and medical imaging," (Prof. Y. Vardi, Statistics) Ph.D. in Operations Research, January 1996.
- Ray Iezzi, "Biofeedback modulation of human visual evoked potentials," (Prof. Tzanakou), M.S., April 1996.
- Jerry Chen, "Depth Mapping in Image Registration," (Prof. Dunn), M.S., October 1996.
- Dan Bahcall, "Interference when attending to two nearby stimuli," (Prof. E. Kowler, Psychology), M.S., December 1996.
- Cynthia Nakatani-Yoshie Enderwick, "Two approaches in the automated classification of mammograms: global versus local scale feature extraction," (Prof. Tzanakou), M.S., May 1997.
- Jennifer L. Hamilton, "Neural network simulation of temporal gradient associated with memory loss in Alzheimer's disease," (Prof. Tzanakou), M.S., May 1997.
- Sergey Aleynikov, "A database image management system with automated classification of retinal hemorrhage damage," (Dr. E. Tzanakou), M.S., May 1997.
- Junqing Huang, "A generalized method of analyzing three-dimensional information of micrographs," (Prof. Dunn), Ph.D., October 1997.

- Dave Melcher, M.S. thesis committee, “Shape, surfaces and saccades” (Prof. E. Kowler), Spring 1998.
- Yasemin Munevver Akay, "Analysis of fetal heart rate variability during labor using wavelet and neural networks: A feasibility study," (Prof. E. Tzanakou), Ph.D., January 1999.
- Polly Tremulet, committee member for Ph.D. qualifying exams (Prof. J. Feldman), Spring 1999.
- Dan Bahcall, committee member for qualifying exams and Ph.D. thesis defense (Prof. E. Kowler), Ph.D., Summer 1999.
- Dave Melcher, committee member for Ph.D. qualifying exams (Prof. E. Kowler), Spring 1999.
- Claudia Mello-Thoms, committee member for Ph.D. proposal (Prof. Dunn), October 1999.
- Shuifang Wu, "A real-time machine vision system for leukocyte counts with differential" (Prof. J. Wilder), M.S., Dec 1999.
- Claudia Regina Mello-Thoms "An Analysis of Perception Errors Through Image Structure", (Prof. Dunn), PhD, September 15th, 2000.
- Ms. Akiza Boddie-Willis "Myelination of the frontal lobe in children with and without brain pathologies," (Prof. Dunn), M.S., September 2001.
- Wei Lin, “A networked microscope server for distance learning” (Prof. J. Wilder), M.S. defended May 2001.
- Dhanraj Vishwanath, “Localization of objects in eye movements and perception” (Prof. Kowler), Ph.D. awarded October 2002.
- Timothy Gersch, “Dynamic allocation of attention during the execution of sequences of saccades” (Prof. Kowler), M.S. 2003.
- Elizabeth Uyeda, “A Visual Evoked Potential Study of the Effects of Attention on Spatially Random Noise” (Prof. Tzanakou), Ph.D., defended March 2003.
- Brett DeMarco, "A Multi-Resolution Analysis Of The Effect Of Face Familiarity On Human Event Related Potentials" (Prof. Tzanakou), M.S. thesis defended November 6, 2006.
- Aleksandra Sarcevic, (Prof. Lesk), Ph.D. qualifying exam committee, Information and Library Studies, March 2007.
- Kristina Denisova, "Apparent Motion and Shape Perception" (Prof. Singh), Ph.D. qualifying exam committee, November 2007.
- Erica Briscoe, "Shape Perception" (Prof. Feldman), Ph.D. qualifying exam committee, November 2007.
- Marina Malysheva, (Prof. Gwizdka), Ph.D. qualifying exam committee, Information and Library Studies, April 2008.
- Jamie Joseph, (Prof. Steven Silverstein), Ph.D. qualifying exam committee, Summer 2010.
- Elio Santos, (Prof. Eileen Kowler) M.S. thesis committee, “Anticipatory smooth eye movements in response to global motion”, September 2010.
- A.K. Najeebullah Chowdhury (Prof. Anant Madabhushi), M.S. thesis committee, “Concurrent segmentation of the prostate on MRI and CT via linked statistical shape models for radiotherapy planning”, July 26, 2011.
- Lyn Ma, (Prof. Manish Singh), Honors thesis committee, Spring 2013.
- Jamie Joseph, (Prof. Steven Silverstein), Ph.D. thesis proposal committee, Summer 2011; defended June 12, 2013.
- Sung-Ho Kim, (Prof. Feldman, Psychology), Ph.D. thesis defended, September 2011.
- Yuwen Zhang, 2011, (Prof. Tzanakou), Ph.D. thesis proposal, September 14, 2011.
- Steven A. Cholewiak (Prof. M. Singh, Psychology), Ph.D. Qualls, Fall 2011.
- Alex Brunfeldt (Prof. W. Craellius, BME), M.S. Thesis defense, “Quantification and Analysis of Upper-extremity Hemiparesis Using a Novel Human-Computer Interface,” December 2011.

- Seha Kim, Doctoral Qualifying Exams Committee (chair: Prof. J. Feldman), September 2012.
- Krystal Thumann, Honors Thesis, Paul Blaney Advisor, “Art Therapy as a Treatment for Mental Disorders: A More Effective Option in the Current Psychiatric Realm”, May 2014.
- Xiaoli (Lily) He, Masters Thesis “Structure from motion without projective consistency”, Prof. Manish Singh advisor, October 2015.
- Keith Feigenson, Postdoctoral Mentoring Committee (chair: Prof. S. Silverstein), 2011-2014.
- O. Daglar Tanrikulu, Masters Thesis “Geometric Figure-Ground Cues Override Standard Depth From Accretion-Deletion”, Prof. Manish Singh advisor, January 2014.
- Seha Kim, member of Ph.D. Thesis committee “Inference of 3D Shape from Line Drawings”, defended April 7, 2015.
- Matthew Roche, Post-doctoral Mentoring Committee (chair: Prof. S. Silverstein), February 2013-present.
- Xiaoli (Lily) He, Qualifying Exam, Prof. Manish Singh advisor, July 2016.
- O. Daglar Tanrikulu, Qualifying Exam, Prof. Manish Singh advisor, July 2016.
- Shuqi Yang, Qualifying Exam, Prof. Rochel Gelman advisor, July 2016.

17. PLACEMENT OF RECENT GRADUATES

- **Joshua Dobias** is Assistant Professor of Psychology, Marywood University, PA.
- **Xiaohua Zhuang**, Ph.D., is now an Assistant Professor of Psychology at the Illinois College of Optometry.
- **Anshul Jain** is a Research Investigator at IFF (International Flavors & Fragrances Inc.), 2013 – present.
- **Sharon Sally**, Ph.D., is now an assistant professor in the Department of Psychology, Lakehead University, Ontario, Canada.
- **Chia-huei Tseng** has been appointed Assistant Professor at the Department of Psychology in Hong Kong University.
- **Ji Hong**, Ph.D., was a post-doctoral associate at the University of Louisville in Kentucky, working with Prof. Zijiang J. He.
- **Wonyeong Sohn**, Ph.D., (2010 – present) Research Scientist with Kimberly-Clark Corporation in GhiHeung, Gyeonggi-do, Korea; (2007 – 2010) Post-doctoral associate in the Institute of Psychological Sciences, Seoul National University, Seoul, Republic of Korea, with Prof. Sang-Hun Lee.
- **Erik Blaser** has been promoted to Professor at the Department of Psychology, University of Massachusetts, Boston.
- **Dr. Zoltan Vidnyanszky** is Director of Research, MR Research Center, Szentágothai Knowledge Center- Semmelweis University, Budapest, Hungary.
- **Andrew D. Griffiths** is a lecturer at the William Paterson University, Wayne, NJ.
- **K.S. Ramanujan** is now working full-time at Avaya Labs as a Supervisor of Members of Technical Staff.
- **James McGowan** is now working full-time at Bell Labs as a Member of Technical Staff and teaches courses at Rutgers as an adjunct lecturer.
- **Jong-Ho Nam** has been appointed Assistant Professor at the Department of Psychology, the Catholic University of Korea
- **Amy Rosenthal** is now the Director of Web Technology at the Robert Wood Johnson Foundation.
- **Ming Yang** is now working full-time at ORS Automation Inc, on machine vision projects (ORS stands for Object Recognition Systems).

- **Manpreet Kaur** works as a Usability Specialist for Idea Integration in Houston, TX.
- **Pratima Bhoj-Kavdeh** is with Medicomputer systems, N.C., as a Programming Analyst.

18. COURSES AND SEMINARS TAUGHT / ADVISING

18.1. GRADUATE COURSES

- **BME Ethics 16:126:601-01** (classroom, ~30 students) **and 16:126:601-90** (online, ~8 students), Fall 2016, 2017.
- **16:710:606, Advanced Studies in Neuroscience**, co-taught with Profs. Steve Silverstein (UMDNJ) and Alexander Kusnecov (RU), attended by 10 graduate students in Neuroscience, Spring 2012.
- **16:125:615, "Advanced Topics in Brain Research,"** Department of Biomedical Engineering (BME); cross-listed as **01:830:514, "Perception,"** in the Department of Psychology, and as **16:185:603:02, "Seminar in Cognitive Science VII"** in the Center for Cognitive Science, Fall 2010. This is a 3-credit lecture course, attended by 10 students, on average, taught on a regular basis. I have the sole responsibility for the course from 1990 to the present. I have edited a textbook, *Early Vision and Beyond*, published by MIT Press in 1995, for use in this class; taught annually in 1993-1998 and every other year in 2000-present.
- **16:714:521/522 "Integrative Methods in Perceptual Science (IMPS)"** I actively participated in designing and contributing experiments for this class that is essential for the Perceptual Science IGERT Program (Fall 2008).
- **16:125:518, "Computer Applications in Biomedical Engineering,"** Department of Biomedical Engineering (BME). This was a 3-credit lecture course, attended by 10 students, on average, taught on a regular basis with Prof. Eikenberry of UMDNJ from 1990 to 2001.
- **16:125:602, "Seminar in Biomedical Engineering,"** Department of Biomedical Engineering (BME). This was a 1-credit seminar class, attended by approximately 75 students, Spring 1994, 1997.
- **16:185:500, "Proseminar in Cognitive Science,"** Thomas Papatomas, Lila Gleitman and Guest Lecturers. This 3-credit course is required for graduate Certificate in Cognitive Science, issued by RuCCS, attended by 18 students (Fall 2005).

18.2. UNDERGRADUATE COURSES

- **16:185:412, "Visual Intelligence,"** co-taught with Prof. Manish Singh, Spring 2018.
- **01:090:101 Byrne First-Year Seminar** (section # changes from year to year), undergraduate students, "Illusions: Royal Path to Interdisciplinary Brain Research". I **volunteered** for the First-Year Seminars Program, responding to an initiative by Dr. Barry Qualls, Vice President for Undergraduate Education, and Dr. Kathleen Hull, former Director of the Byrne First-Year Seminars, **Fall 2007, Spring 2009, Fall 2009, Spring 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017.**
- **14:125:401/402, "Senior Design"**, Department of Biomedical Engineering (BME). Coordinator of this two-semester 3-credit required course for all BME seniors (Spring 2001 to Spring 2008). I served in the Senior Design coordinating committee with Profs. Androurakis, Langrana and Zahn (2008-2010).
- Represented Rutgers in the full-day **BME – IDEA (Innovation, Design, and Entrepreneurship Alliance)** Meeting during the BMES Conference in Baltimore, MD, on September 28, 2005. The meeting featured morning speakers on BME Senior Design issues, on ABET accreditation, and entrepreneurship. It concluded with group workshops on methods to improve Senior Design courses. I acquired valuable information on the ABET accreditation process.
- **14:330:474, "Advanced Computer Engineering"**, Department of Electrical and Computer

Engineering (ECE). This was a 3-credit lecture course, attended by 75 students, Fall 1989.

- **01-830-480, "Topics in Visual Perception"**, Department of Psychology, co-taught with Prof. Julesz in the Spring of 1996. This was a 3-credit lecture course, attended by 12 students.

- **01:830:514, "Perception,"** Department of Psychology, shared teaching responsibilities with Profs. Singh (coordinator), Gallistel & Feldman by lecturing in three classes, Fall 2003.

18.3. PROPOSAL FOR UNDERGRADUATE COURSE

- **Sensory Processes, Mechanisms, And Computational Models"**, Department of Biomedical Engineering. This course would cover general principles of information processing in the human sensory organs, as well as in the early, low-level neural mechanisms and pathways that transmit the signals to the cortex.

18.4. LECTURES AT COURSES

- **01:185:411**, "Advanced Topics in Cognitive Science", taught by Mary Rigdon, Spring 2014, 2015, 2016, 2017. I lectured on "The hollow-mask illusion and its use in schizophrenia research".

- **16:185:500, "Proseminar in Cognitive Science,"** • Taught by Prof. E. LePore and Guest Lecturers, Falls **2000, 2001**. "Interaction of top-down and bottom-up processes in vision". • Taught by Prof. Z. Pylyshyn & Guest Lecturers, Falls **2007, 2008, 2009, 2011, 2013, 2014**; "Cross modal auditory/visual interactions in perception". • Taught by Prof. B. McLoughlin & Guest Lecturers Falls **2015, 2016, 2017**. "Perceiving three-dimensional faces, objects & scenes" class lecture and tour of my Lab.

- **06:090:130, "Introduction to Scientific Research,"** coordinated by Prof. Ellen F. Mappen under the Douglass Project for Women in Math, Science, and Engineering, Spring 1996.

- **01-830-301, "Sensation and Perception"**, Department of Psychology, taught by Prof. Julesz in the Fall of 1993. This was a 3-credit lecture course, attended by 8 students.

- **01:090:101, Byrne First-Year Seminar, "Light"**, Department of Physics, taught by Prof. Paul Leath in the Fall of 2008. I gave a guest lecture on visual illusions.

18.5. LECTURE SERIES

- Representative of both the Laboratory of Vision Research and the Department of Biomedical Engineering in the organizing committee for the Human and Computer Vision lecture series, 1994-2005; I maintain the same role (2005-present) in this series under the new name "Perceptual Science" [served as host for speakers Dov Sagi & Carla Evans in Fall 2006].

- Organizer of seminar lectures at the Laboratory of Vision Research, 1989-present.

18.6. HONORS RESEARCH COURSES

- **12:090:497 and 12:090:498:01- Henry Rutgers Scholars Honors Research**, Rutgers College: David McCabe, Fall 2001, Spring 2002.

- **Fall 2000 - 06:090:498, Honors research**, Mabel Smith Douglass College Honors: Lisa Bono.

- **06:090:497 and 06:090:498, Honors research**, Mabel Smith Douglass College Honors, taught to Tiffany Conway, Fall 1997, Spring 1998. She was awarded the Alice H. and Walter F. Phillips Award for Outstanding Honors Proposal; also graduated with High Honors in Psychology.

18.7. OTHER COURSES

- **14:125:292** (3 credits, BME), Sarah Salter, BME freshman Directed Research on Vision and 3-D Modeling, Spring 2015.
- **01:830:391** (3 credits), Ariel Rodriguez, SAS Biological Sciences, Research in Psychology, Spring 2015.
- **01:185:495:P1** (3 credits, (RuCCS), Rihab Sadik, BME senior, Fall 2013.
- **01:830:391** (2 credits) Jordan Paley, undergraduate, Research in Psych, Fall 2013.
- **14:125:291** (3 credits, BME), Ushma Majmudar, BME sophomore, Fall 2013
- **14:125:492** (3 credits, BME Spec Prob), Jay Ravaliya, BME undergraduate, Spring 2012.
- **16:115:556, Ethical Scientific Conduct**, facilitated a class discussion [Janet Alder, Ph.D., Course Director], Spring 2012.
- **14:125:492** (3 credits, BME Spec Prob) Daniel Moritz, BME sophomore, Spring 2012
- **01:830:495** (3 credits, Advanced Research in Psychology), Vanja Vlajnic, Psychology Department undergraduate; project: Reverspectives and hollow masks, Fall 2010.
- **14:125:491** (1.5 credits, Special Problems in BME) Carolynn Crute, BME sophomore, Fall 2010.
- **14:125:492** (1.5 credits), Anuja Sarwate, BME freshman, Spring 2013.
- **14:125:491** (2 credits), Anuja Sarwate, BME freshman, Fall 2012.
- **14:125:121Mark Gacki**, senior, Biomedical Engineering, , Senior Design 1 Projects. Fall 2010, 2 credits
- **14:125:491** (3 credits BME Spec Prob), Jordan Ash, BME sophomore, Spring 2010.
- **14:125:492** (3 credits BME Spec Prob), Jordan Ash, BME sophomore, Fall 2010.
- **01:830:495** (3 credits), Advanced Research in Psychology, Anna Zalokostas, Fall 2010.
- **01:830:392** section: 01 (3 credits), Research In Psychology), Jordan Ash, Fall 2010.
- **16:125:621/622, Special Problems in Biomedical Engineering**, taught to students individually, about one per semester.
- **16:125:701/702, Research in Biomedical Engineering**, taught to students individually, averaging one-and-a-half per semester, sometimes in Summer.
- **14:330:491/492, Special Problems in Electrical and Computer Engineering**, taught to students individually, 1990-1995.
- **01:830:391/392, Independent Study**, Department of Psychology, taught to students individually, which averages once every two years.
- **01:830:501/502, Non-Thesis research**, Department of Psychology, taught to students individually, taught occasionally, about every four years (Wonyeong Sohn, Fall 1999)
- **01:830:497 Honors research**, Department of Psychology, taught to Tiffany Conway, Fall 1997, Spring 1998
- **06:090:497 - 06:090:498, Mabel Smith Douglass Honors research**, Douglass College, taught to Tiffany Conway, Fall 1997, Spring 1998.
- **14:440:100, Engineering Orientation Lectures**, undergraduate students, Nov 5 1999.

18.8. UNDERGRADUATE RESEARCH (ARESTY)

- **Yuan Li**, Fall 2016 – Spring 2017: “Optimizing stereoscopic apparatus and stimuli to study differences between schizophrenia patients and controls”, working under the Aresty Research Assistant Program, CS undergraduate.
- **Jason Krasnits**, Fall 2015 – Spring 2016: “Modeling static and moving 3-D objects and faces”, working under the Aresty Research Assistant Program, CS undergraduate.
- **Leo Kozachkov**, Physics undergraduate, “Human versus scrambled masks”, Fall 2013 – Spring 2014.
- **Carolynn Crute**, BME Undergraduate, Fall 2010 – Spring 2011

- **Aleksandra Sherman**, Summer/Fall 2007, Spring 2008: “The role of perspective and angle polarity in perceiving three-dimensional shapes”. This work won a \$500 competitive award from the Aresty Research Center for Undergraduates, and it was accepted for presentation at the 2008 *National Conferences on Undergraduate Research (NCUR)*, Salisbury University.

18.9 WORKSHOPS ATTENDED TO IMPROVE TEACHING SKILLS

- I attended a workshop on teaching portfolios, organized by the Teaching Excellence Center at Rutgers in September of 1993, in which Prof. Seldin, Distinguished Professor of Management at Pace University, discussed the concept of a teaching portfolio as a tool for documenting and improving teaching effectiveness.
 - I attended a one-week (part-time) workshop, organized by the Teaching Excellence Center at Rutgers during the week of 16-20 May, 1994. Prof. Seldin and his team helped Rutgers faculty develop our teaching portfolios, using a mentoring system. Prof. Diane vom Saal of the University of Missouri assisted me to complete my teaching portfolio. I have volunteered to act as mentor for other Rutgers faculty.
 - I attended the workshop “Extend Learning and Interaction beyond the Classroom”, organized by the Continuous Education & Outreach at Rutgers, on June 25, 2007, taught by Brent Monahan.
 - I regularly attend workshops for Byrne First-year Seminars, in preparation for teaching my Fall 2007, Spring 2009, 2010, 2011, 2013 and 2014 courses.
 - I participated in a full-day workshop on Learning Assessment, directed by Dr. Richard Keeling, offered by the Rutgers Teaching Excellence Center, March 3, 2009.

19. CIVIC ENGAGEMENT (reports since 2008)

19.1. EDUCATIONAL

- **March 3, 2016: Keynote Lecture** on “3-D Visual Illusions - Their Value in Vision Research”, Science Fair, Black River Middle School of Chester, NJ.
- **2008-2015: Chair of 7-member Scholarship Committee** of the Kastorians Society OMONOIA of New York. Committee met about 8 times a year to set the rules and evaluate applications. We grant about 30 scholarships/year with a total annual award budget of approximately \$40,000. We hold a scholarship-award ceremony where we honor a keynote speaker: - 2009: Dr. Dora Pinou, Associate Professor, Western Connecticut State University; - 2010: Mr. Nick Davatzes, CEO Emeritus of A&E Television Networks; - 2011: Ms. Alice Rigas, Associate Dean, Columbia University Law School. – 2015: Prof. Maria Spiropulu, CalTech.
- **2012-present: Fundraising effort for Modern Greek Studies Program (MGSP) at Rutgers University.** I was introduced to Mr. Nikos Mouyiaris by a common friend. Mr. Mouyiaris is the CEO of Mana Products and a loyal 1971 M.S. alumnus of the Rutgers Chemistry Department. He indicated his willingness to make a major donation to the MGSP at Rutgers University. In May 2012, I arranged for him to meet key people at Rutgers: the President, the Vice President for Undergraduate Education, Assoc. Vice President of Foundation, MGSP’s Director, instructors and students, and members of the Board of the Elytis Chair Fund. Ultimately, Mr. Mouyiaris has donated \$800,000 over 4 years, challenging the University to match 2-to-1 donations up to \$100,000/year. This has provided a strong incentive for donors. I am coordinating the fundraising effort with Prof. Panos Georgopoulos and Ms. Andrianni Vollas Viscariello, Assoc. Vice President for Development at the Rutgers University Foundation. We were able to raise \$120,000 in 2013, \$85,000 in 2014 and \$40,000 in 2015. Thus, with Mr. Mouyiaris’s pledge, we have raised more than \$1M so far.
- **November 17, 2015: Talk** - How We See the World with Our Eyes and Brain, Second Westfield Senior Citizen Center, Westfield, NJ.

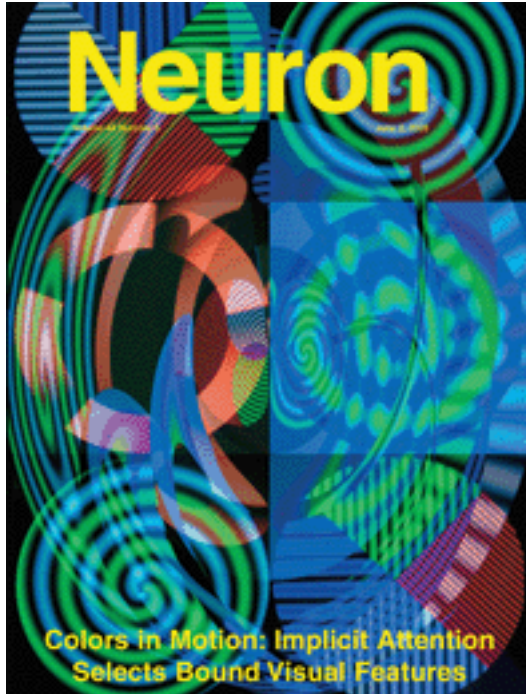
19.2. CHARITY

2008-present: Volunteer in Interfaith Food Pantry, Morristown, NJ

Provides non-perishable supplemental and emergency food to eligible Morris County residents in need.

APPENDIX A. OUR RESEARCH ON NATIONAL PUBLIC RADIO (NPR)

National Public Radio featured the following article on "Morning Edition Saturday" on June 4, 2005. Joe Palca of NPR interviewed David Melcher of Oxford Brooks University, the principal author. He also interviewed Geoff Boynton of the Salk Institute, and Jeremy Wolfe of Harvard University, about their work in related areas of brain research.



Article in *Neuron*: Melcher D, Papathomas TV, Vidnyanszky Z. "Implicit attentional selection of bound visual features," *Neuron*, June 2, 46(5), 723-729, 2005. The journal, one of the prime publications in brain research, featured the article on the cover, shown here, with the following text:

"The effects of selective attention on visual features that are explicitly attended have been well-demonstrated. Here, Melcher et al. provide evidence that, in addition to the demonstrated effects of attention on visual features that are selectively attended, selective attention can also modulate the processing of other visual features that are task irrelevant, not consciously perceived, and outside the explicit focus of attention. The authors determined the units of these new selection processes and suggest 'implicit attentional selection' as a term to differentiate these processes from those of explicit selection of task-relevant visual information. These results open a new perspective in the research on visual attention and provide testable predictions about the neural mechanisms of implicit attentional selection."

Related Work: Papathomas and Vidnyanszky collaborated on additional experiments to locate areas in the brain that facilitate these attentional effects. They used a combination of psychophysical and brain imaging experiments with researchers at Princeton University's fMRI (functional Magnetic Resonance Imaging) facility. Their team obtained evidence that human brain area MT+, long considered to be a primary area for processing visual motion, is involved in such attentional effects. Interestingly, area V1, the first cortical area that accepts input from the eyes and provides feedforward input to MT+, was not involved in these attentional effects. Their manuscript appeared in *Neuroreport* [Sohn W, Chong SC, Papathomas TV, Vidnyanszky Z. "Cross-feature spread of global attentional modulation in human area MT+", *Neuroreport*, 16(12) 1389-1393, 2005].

People affiliated with Rutgers University

Thomas V. Papathomas is Professor of Biomedical Engineering, Associate Director of the Laboratory of Vision Research (LVR), and member of the Center for Cognitive Science (RuCCS) at Rutgers University.

David Melcher obtained his Ph.D. in 2001, with **Eileen Kowler**, Professor of Psychology at Rutgers University, as his advisor. He is currently a Principal Lecturer at Oxford Brooks University.

Zoltan Vidnyanszky worked as a post-doctoral associate with the late Dr. **Bela Julesz**, Professor of Psychology and Director of the Laboratory of Vision Research at Rutgers University, in 1998-2000. He is currently a Senior Research Fellow at the Hungarian Academy of Sciences.

Wonyeong Sohn obtained her Ph.D. from Rutgers University in 2004, with Prof. Papathomas as her advisor. She is currently a post-doctoral associate at Seoul National University in Korea.

Acknowledgments: This research was supported by U.S. NEI/NIH (EY 013758-01) to TVP; by MUIR (project PRIN) and by grants from the RSBA to DM; and Hungarian National Research and Development Program to ZV.

June 10, 2005

APPENDIX B. REPORT ON BUSCH CAMPUS DEAN ACTIVITIES JULY 2008 – JUNE 2011

(This report is meant as a guide for the type of activities the job of Busch Campus Dean entailed)

I work together with fellow Campus Deans, Busch Dean of Students and colleagues in the Undergraduate Academic Affairs (UAA), former Office of Undergraduate Education (OUE), especially the Office of Academic Engagement and Programming, to bring faculty and undergraduate students together for academic, cultural and community-building events beyond the classroom. This is a demanding, time-consuming job that takes much time and effort; however, the rewards of having an impact on the education of undergraduate students far outweigh the time and effort. The most important projects and activities for academic years 2008-2009, 2009-2020 and 2010-2011 are listed separately below:

B.1. DETAILS FOR ACTIVITIES DURING JULY 1 2010 – JUNE 30 2011 NOTES

1. This is an abbreviated list that covers only participation in events (~107 entries).
2. **Weekend and evening** activities and events are highlighted in **blue**.

- Th 2010/07/08 Orientation Lecture to New Students
- Tu 2010/07/13 Project SUPER Orientation Talk 18 participants, 3 staff members.
- Tu 2010/07/16 Talk at Douglass Science Institute (DSI)
- F 2010/07/16 Orientation Lecture to New Students
- F 2010/07/23 Orientation Lecture to New Students
- F 2010/07/23 Recorded Cellphone Comment for Zimmerli Museum exhibit
- Tu 2010/07/27 Save Energy Meeting with Mike Kornitas
- Th 2010/07/29 Suzanne Delehanty, Zimmerli Museum Director laboratory visit
- F 2010/08/27 A.I.M.S. Orientation (Ghada Endick)
- Sa 2010/08/28 **Freshmen Convocation (weekend)**
- Sa 2010/08/28 **Freshmen “Throwdowns” (weekend evening)**
- Tu 2010/09/07 Meeting on Research for Undergraduates
- W 2010/09/08 Meeting for program “Professors Share Secrets” (see Sep 16)
- W 2010/09/08 **Meeting with Engineers Without Borders (EWB) (evening)**
- M 2010/09/13 **Meeting of EGC (Engineering Governing Council) (evening)**
- W 2010/09/15 SoE ABM Deans’ Meeting
- W 2010/09/15 **Busch Campus Deans’ Reception (evening)**
- Th 2010/09/16 **Program “Professors Share Secrets” (see Sep 8) (evening)**
- M 2010/09/20 Meeting with Dr. Arthur Casciato on Distinguished Scholarships
- F 2010/09/24 **Attended President's Annual Address**
- M 2010/09/27 Meeting w/ SoE Assoc Dean I. Rosen for SoE MatLab issues
- Tu 2010/09/28 Interview with Ms. M. Tong for a Career Services Targum Article
- Tu 2010/09/28 Campus Life Council meeting
- Tu 2010/09/28 Pursued MatLab issue; Janet Jones & Kathy Scott (see Sep 27)
- W 2010/09/29 New Faculty Reception, President’s House

- W 2010/09/29 Dinner for Project Civility
- Su 2010/10/03 Screening of "Atlantic Crossing", Zimmerli Museum (weekend)
- W 2010/10/06 SoE ABM Deans' Meeting
- Tu 2010/10/12 President's Administrative Council
- W 2010/10/13 Campaign for Rutgers, Newark NJPAC (evening)
- Th 2010/10/14 Byrne/Aresty event - Music performance (evening)
- F 2010/10/15 Campus Deans Meeting
- Tu 2010/10/19 Meeting for EWB video promotion, with Marie Logue
- Tu 2010/10/19 Meeting of PGC (Pharmacy Governing Council) (evening)
- M 2010/10/25 Panel Discussion "Water Work", DRC (evening)
- F 2010/10/29 OUE (Office of Undergraduate Education) breakfast/meeting
- Tu 2010/11/02 Talk at Lippincott Residence Hall (evening)
- W 2010/11/03 SoE ABM Deans' Meeting
- W 2010/11/03 Zimmerli museum event for EWB (evening)
- F 2010/11/05 Campus Deans Meeting
- W 2010/11/10 (ALP) Academic Leadership Program meeting
- Th 2010/11/11 Meeting with Busch Campus Dean student volunteers
- Tu 2010/11/16 Campus Life Council meeting
- Tu 2010/12/07 President's Administrative Council
- W 2010/12/08 SoE ABM Deans' Meeting
- W 2010/12/08 New Busch Housing Committee
- F 2010/12/10 Campus Deans Meeting
- F 2010/12/10 OUE gathering at the Geology Museum (evening)
- W 2010/12/15 Meeting with Busch Campus Dean student volunteers
- W 2010/12/15 Midnight Breakfast, serving students at BSC cafeteria (midnight)
- F 2010/12/17 STEP Advisory Committee
- F 2011/01/27 Campus Deans Meeting
- Th 2011/02/03 Suicide Prevention Mtg
- Th 2011/02/03 Practice Interview for Art Casciato
- F 2011/02/05 Wrote, rehearsed video message for Dance Marathon
- W 2011/02/09 Attended Spike Lee talk (evening)
- Th 2011/02/10 SoE ABM Deans' Meeting
- Th 2011/02/10 Campus Deans Meeting
- Th 2011/02/10 Project Civility - Civil Spaces (evening)
- F 2011/02/12 Meeting with Busch Campus Dean student volunteers
- M 2011/02/14 Recorded video message for Dance Marathon
- W 2011/02/16 Meeting w/ Greg Jackson (Asst VP for Acad Affairs in OUE)
- 2011/02/21-25 National Engineers Week at Rutgers SoE
- M 2011/02/21 National Engineers Week - Engineering Scholarship Awards
- Tu 2011/02/22 National Engineers Week - Sponsored event
- Th 2011/02/24 National Engineers Week (evening event)
- Tu 2011/03/08 President's Administrative Council
- W 2011/03/09 SoE ABM Deans' Meeting
- Th 2011/03/17 Worked with SoE Asst Dean Evelyn Laffey on NSF Proposal
- Tu 2011/03/22 Visited UMDNJ Tower Auditorium for future events
- Th 2011/03/24 Attended Phi Beta Kappa Lecture (evening)
- Th 2011/03/24 Met with HCA (Hellenic Cultural Society) E-Board (evening)
- F 2011/03/25 Campus Deans Meeting
- W 2011/03/30 Project Civility - Sportsmanship: Civil Athletes and Fans (evening)

- F 2011/04/01 OUE (Office of Undergraduate Education) breakfast/meeting
- Sa 2011/04/02 STEM Minorities (weekend)
- W 2011/04/06 SoE ABM Deans' Meeting
- W 2011/04/06 Attended Zimmerli Museum / 1st Wednesday
- Su 2011/04/10 Academic Excellence Awards (Sophomores) (weekend)
- M 2011/04/11 Academic Leadership Program meeting
- M 2011/04/11 Attended Byrne Event: Japanese Flower Arrangement
- Tu 2011/04/12 Student Employee of the Year
- W 2011/04/13 Attended EWB Banquet Fundraiser (evening)
- Th 2011/04/14 Attended Academic Coordinating Council meeting
- Th 2011/04/14 Campus Life Council meeting
- Tu 2011/04/26 STEP Advisory Committee
- W 2011/04/27 Project Civility event (evening)
- Th 2011/04/28 Sponsored EWB Golf Outing Fundraiser
- Th 2011/04/28 Campus Deans' Meeting
- March, April 2011 Raised \$8,000 for Rutgers Modern Greek Studies Program
- Sa 2011/04/30 Attended HCA Annual Fundraiser Banquet (evening)
- W 2011/05/04 SoE ABM Deans' Meeting
- W 2011/05/04 Year-end Awards Reception at President's House
- W 2011/05/04 Attended Zimmerli Museum / 1st Wednesday
- Th 2011/05/12 Reception for Students awarded prestigious scholarships
- F 2011/05/13 Preview of video rough-cut "Thailand Untapped"
- Sa 2011/05/14 Attended SoE Reception (weekend)
- Su 2011/05/15 Attended Commencement and BME Dept. Reception (weekend)
- Th 2011/05/19 ALP: Talk, Prof. Richard Arum, author of "Academically Adrift"
- Th 2011/05/19 Campus Deans' Meeting
- F 2011/05/20 Meeting w/ Barry Qualls (VP for Acad Affairs in OUE)
- W 2011/05/25 Arun Mukherjee's (Director, Space Management) retirement lunch
- Tu 2011/05/31 President's Administrative Council
- Th 2011/06/09 Meeting with Barry Qualls and Deans
- Th 2011/06/23 Met HCA E-Board to plan Cavafy theater play (2011/12/210)
- F 2011/06/24 Orientation Lecture to New Students
- Tu 2011/06/28 My talk to Upward Bound students

B.2 ACADEMIC YEAR 2009-2010

B.2.1. SUMMARY OF ACTIVITIES DURING 2009-2010 ACADEMIC YEAR

My main objective as Busch Campus Dean is to engage faculty and undergraduate students for academic, cultural, outreach and community-building activities beyond the classroom. In this second year, I concentrated my efforts in the five main areas listed below. Details for each area are given in the following pages.

1. Sponsoring student-initiated and faculty-initiated activities that promoted the main objective of the Campus Dean.
2. Supporting NB/Piscataway University-wide events and activities, such as Orientation for Incoming First-Year Students, Rutgers Day, RAH, etc.
3. Establishing solid relationships in the Office of Undergraduate Education, particularly with other Campus Deans and Marie Logue's group.

4. Establishing solid relationships with key constituents on Busch Campus (Dean of Students, Area Deans, Department Heads, Student Governing Councils, Residence Life, Student Life, etc.)
5. Participated in meetings, initiatives, celebrations and ceremonies to familiarize myself with the key people and issues (faculty, administrators, staff, alumni, parents).

B.2.2 INITIATIVES FOR 2009-1010

1. S.T.E.M. for Humanity (Science, Technology, Engineering and Math for Humanity): Given that the Busch Campus houses the STEM disciplines, our vision is to encourage and support activities by students and faculty in the STEM areas that have a component to benefit humanity through volunteerism for social action (education, sustainability, health care, environment, economic development, etc.). The STEM Education Coalition (www.stemedcoalition.org), of which Rutgers is a member, is involved in initiatives of this nature. The plan is to form a task force to explore concrete initiatives towards this goal.

2. ART AND SCIENCE: I have established contact with Suzanne Delehanty, the Director of the Zimmerli Museum, to sponsor events and exhibits at the interface between art and science. We co-sponsored four events.

B.2.3. DETAILS FOR ACTIVITIES DURING 2009-2010 ACADEMIC YEAR

NOTE: This is a partial list that covers only participation in events (~90 entries)

- (For Initiative 1 above): With fellow Campus Deans, we have been working since Fall 2009 to promote outreach by Rutgers undergraduates. Toward this end, we joined the effort to form INSPIRE, an umbrella of student groups with strong outreach programs: Participants include the initiator Bo Wang (PGC President) and representatives: Wael Kanj from Foundation for International Medical Relief of Children (FIMRC); Nasir Uddin from em[POWER]; James Hughes from Engineers Without Borders; Andrew Nye from PGC; Ifeanyi Enejere from IEA; Sana Kathawala from OXFAM.
- For all of the Initiatives above, we reached out for Busch Campus Deans volunteers to act as our advisers and eyes-and-ears for pursuing community-building events on campus.
- Spring 2010 through Spring 2011: Played a very active role, with fellow Campus Deans, in sponsoring and coordinating a video for EWB, produced by Dena Seidel and her crew (see 5/24/10). I engaged Dean Farris of Engineering, who contributed \$2,000 for the video.
- July 1, 2009: Met with Tom Farris, new Dean of the School of Engineering (SoE), to explain how he and I can work together to improve undergraduate Education in the SoE. I suggested that he include me in the SoE Deans' Meeting and he agreed. I have been attending these monthly meetings ever since.
- July 7, 2009: Met with EWB President James Hughes and discussed how best to interact with EWB and set priorities for their projects. Here is a summary of our discussion: In an effort to optimize the process of submitting financial requests made by the Rutgers Chapter of EWB to the campus deans, and also as a means to evaluate, improve and aggregate individual ideas, as well as to maximize the impact of our actions, the chapter will adopt a new approach in asking for support. Members of the chapter will be required to form coalitions with other student organizations and submit

documentation for project ideas to the Executive Board, at which point the Board will work on the ideas, combine similar ideas, and prioritize projects, before submission to the campus deans for funding.

- With Mike Stillwagon, we have formed “Busch Deans’ Ambassadors”, a group of about 20 student volunteers, who provide us ideas for events, take initiatives for building community spirit on Busch Campus and help organize events.

- As Campus Dean, I played a very active role in recruiting colleagues among the Busch faculty for the Orientation Program, to offer half-hour seminars to incoming students. In addition, I participated as a speaker in two sessions with a talk on “Education beyond the classroom”, in which I talked to them about the rich opportunities that are offered at Rutgers.

- July-November 2009: Co-sponsored public showing of the movie “Naturally Obsessed: The Making of a Scientist” with Justine Hernandez Levine (she initiated it) by getting EWB, PGC, BCC and EGC involved.

- July 8 2009: Contacted Prof. Dunbar P. Birnie, head of the Rutgers Energy Institute and, separately, EWB President James Hughes, Busch Campus Council President - Shaival Shah, and PGC President. I urged them to work with Joanna Regulska on her 2009-2011 Global Initiative on "Ecologies in the Balance? Thinking through the crises".

- July 7-14 2009: Worked with Michelle Brazier and Victor Marsillo to develop an online tool for streamlining the process of submitting requests for sponsoring events made by students/faculty/staff to the campus deans.

- Member of the New Brunswick Campus communications advisory group for Carla Cantor, Managing Editor of Rutgers Today. The group discusses issues about Rutgers Today, as well as a weekly internal, employee e-newsletter for the NB/P campus.

- Working lunches with Mike Stillwagon, Busch Dean of Students, and Jeff Broggi, Assistant Director of Residence Life at Busch, to plan for events during the 2009-2010 academic year.

- Working with Jesse Schibilia to develop ways to enhance the Busch Campus identity (see his e-mail).

- Participated as speaker in the DSI (Douglass Science Institute) program for Women in Math, Science & Engineering. I gave two lectures about my research on perceiving three-dimensional faces and scenes to 52 young women entering 9th grade (July 17) and 46 students entering 10th grade (July 24) {Sanam S Amin, Site Coordinator and Elaine Zundl of the Douglass Project}.

- Attending SoE Deans’ monthly meetings (see July 1, 2009).

- 9/1/09: Meeting with Campus Deans to discuss faculty panel program on “What Faculty Expect.” Organized the actual event on September 10, 2009, with Cara Macaluso.

- 9/1/09: With Mike Stillwagon, Jeff Broggi, Courtney Stone, et al., participated in “Shhhhhhh... The Gathering,” a new tradition initiated by Student Involvement at Rutgers to welcome the new students.

- 9/10/09: Participated in the annual Academic Leadership Program with President McCormick and EVPAA Furmanski.
- Met several times with Daniel Greene (undergraduate student, president of the Cognitive Science Club), Jennifer Jones (graduate student at the GSE) and Nadia Reza-Khokar to plan and organize visit by John Taylor Gatto, an educator with radical views on the educational system.
- 9/11/09: Attended the School of Engineering Convocation at the Engineering Quad Lawn.
- Attended two EGC (Engineering Governing Council) meetings as guest speaker (September 14, 2009, invited by Christine Ho, President & February 8, 2010, invited by Wael Kanj;). I explained my S.T.E.M. for Humanity initiative and invited them to participate.
- Attended two BCC (Busch Campus Council) meetings.
- Attended two PGC (Pharmacy Governing Council) meetings.
- 9/18/09: With several Heads of Departments, participated in an SAS Focus Group where we discussed long-term plans for improving the quality of SAS. Robin Davis and Doug Greenberg moderated the discussion.
- Contacted Vince Logozio and Raymond Scanlon, who won in the Disney Imagineering ImagiNations Design Competition (http://www.nj.com/news/local/index.ssf/2009/06/four_jersey_college_students_t.html) to feature them in a campus event; still in the planning stages.
- Met Suzanne Delehanty, Zimmerli Art Museum Director, and discussed initiatives and projects at the interface between art and science/technology. I introduced her to Cathy Hull, Director of the Byrne First-Year Seminar and invited them to visit the 3-D illusion exhibits at the Laboratory of Vision Research. Cathy visited on 10/15/09, Suzanne visited on 7/29/2010.
- 9/22/09, 10/29/09: Participated in meetings on “Service Learning: Supporting and Coordinating Student-Driven Initiatives”, an initiative that was spearheaded by Michelle Brazier and Matt Matsuda.
- 9/30/09: Attended a reception for New Faculty at the President’s House.
- Participated in all but one Campus Life Council meetings (I was out of town).
- Attended all President’s Administrative Council meetings, excepting one when I was out of town.
- 10/21/09: Attended Visitors Center Opening ceremony.
- With fellow Campus Deans Matt Matsuda and Rick Ludescher, we met with officers from Engineers Without Borders (EWB) and decided to sponsor several of their initiatives. The Busch Campus Dean’s office will contribute most of the funds, because EWB is based mostly on Busch.
- 10/21/09: Attended a reception for Thomas Farris, Dean of the School of Engineering (SoE) at the President’s House. In it, I met Mr. Charles Chang, an alumnus of SoE and I talked to him

enthusiastically about Engineers Without Borders (EWB) without any intent of lobbying. He spontaneously pledged a \$1,000 donation to EWB and he delivered on his pledge.

- 10/22/09: We held a Deans' Night with Mike Stillwagon at the Busch Campus Center.
- 10/23/09: Presented a talk for the Division of Undergraduate Education meeting. The title was "Torn apart - how (not) to pursue two (or more) passions" and I spoke about my dual role as a Campus Dean and a professor.
- 10/28/09: Invited by Leslie Fehrenbach, I presented a talk to the new members of the Board of Trustees of Rutgers University. It was very similar to my talk on 10/23/09 to the Division of Undergraduate Education but I focused more on my research.
- 11/2/09 – ongoing: With fellow Campus Dean Matt Matsuda, we participated and supported an initiative to form INSPIRE, an umbrella of student groups with strong outreach programs.
- 11/11/09: Attended Dedication of MAE Computer Laboratory for Analysis and Design (CoLAD) to former SoE Deputy Dean Abdel Zebib.
- 12/11/09: Attended funeral service for former SoE Deputy Dean Abdel Zebib.
- 2/15/10: Attended memorial service for former SoE Deputy Dean Abdel Zebib.
- 11/17/09-12/7/09: Interacted with Mr. Adrian Sitterle, a senior in ECE and CS, about his idea to organize an independent TEDx event (<http://www.ted.com/tedx>). We finally determined that this idea requires a lot more time and effort than he had available.
- 11/18/09: Kathy Hull suggested that I contact Prof. Marie-Pierre Aubry, who wants to bring Dr. Frans de Waal for a visit at Rutgers. I initially planned to contact Prof. Aubry but I dropped the ball in the fall semester. I contacted Kathy on 2/16/09 to see if we can work on it now.
- 12/1/09: Visited Associate SoE Dean Brown on his last day at work.
- 12/1/09: Participated in RUPA's Hot Chocolate and Donut Tent to "keep students warm" around final exams.
- 12/1/09: Responding to Kathy Hull's invitation, I attended the talk Dr. Temple Grandin on "Animals Make Us Human, and Autism." I am glad I did.
- Worked with Diane Bonanno to sponsor the Big Chill (December 2009)
- 12/8/09: I attended the Douglass Dean reception.
- 12/18/09: Attended the 2009 Technology Showcase organized by the Office of Instructional and Research Technology (OIRT).
- 12/18/09: As a member of the Executive Committee for the Modern Greek Studies Program (chaired by Steve Reinert; members: Gary Farney, Panos Georgopoulos, Tia Kolbaba, Thomas Papatomas, Sarolta Takacs), participated in a meeting to explore ways of strengthening the Program.

- 12/21/09: "Dinner with Barry" at Barry Qualls' home, mostly with people from the Division of Undergraduate Education.

1/11/10: Meeting with Susan Engelhardt, Executive Director, CIVET (Center for Innovative Ventures of Emerging Technologies) to explore ways of engaging undergraduate students and faculty in CIVET's activities.

- 1/20/10-1/27/10: Worked with Art Casciato and wrote evaluations for Yuliya Afinogenova and Edward Lochocki for their Goldwater Fellowship applications (January 2010)

- 1/27/10, 2/1/10: Meetings with Mike Stillwagon and Rick Ludescher to pursue Mike's initiative on Molecular Gastronomy. The plan is to have chef Alex Stupak to come to campus for a demo; Rick will recommend a food scientist to provide facts about Molecular Gastronomy techniques. The event took place on March 29 2010 and was a huge success; it was attended by an SRO crowd of students and Rick Ludescher provided facts about food science.

- 2/2/10: With fellow Campus Deans, we met with Mike Kornitas, University Facilities and Capital Planning (UFCP), to plan and implement "**RU Energy Challenge**", campus-to-campus energy savings competition, co-sponsored by UFCP, Campus Deans, and PSE&G to sensitize people about energy saving.

2/5/10: Participated in the Division of Undergraduate Education Retreat, facilitated by Brent Ruben and Sherrie Tromp of the Center for Organizational Development and Leadership. Quite impressive outcome: clarified vision and mission, as well as meaningful action items for the short and long term.

2/12/10: Met with Marie Logue and Matt Matsuda to discuss revising a form that I have developed for student organizations that seek our support, in preparation for our Campus Deans meeting on 2/19/10.

- 2/12/10: Attended SoE Faculty Meeting with guests President McCormick and EVPAA Furmanski.

2/15/10: Met with Anna Zalokostas, a junior majoring in Psychology and Hellenic Cultural Association (HCA) Organizational Secretary, following her request to explore potential projects for 2010-2011.

- 2/16/10: Engineering Showcase - posters on research, centers, offices, and organizations. Sponsored by the Office of Student Development, Engineering Research Center for Structured Organic Particulate Systems, the Engineering Governing Council, and the Busch Campus Dean's Office. Worked with Assistant Dean Emily Laffey to incorporate the theme of Engineering for Humanity, a special case of S.T.E.M. for Humanity.

- 1/14/10-1/17/10: I connected Anselm Spoeri with Busch Campus units [Biomedical Engineering (Prof. Noshir Langrana, Chair), and the Center for Biomaterials (Prof. Joachim Kohn)] so he can create Gigapans and Photosynths for the WhereRU site. see AnselmSpoeriWhereRU_Spring2010.doc.

- 2/25/10: "Green Expo" on campus on Earth Day this semester. The basic idea is to hold a big event to showcase global warming solutions in action: things that Rutgers is doing through recycling, purchasing, energy efficiency in our buildings, clean energy production, faculty research in clean

energy, and so on. I met with Kate Hubschmitt (kateh123@eden) a senior intern and Betty T. Tran (btran11@eden.rutgers.edu).

3/1/10: I attended a lecture by Thomas Nozkowski, Professor of Painting at the Mason Gross School of the Arts, in the Distinguished Faculty Talk series. His topic was “Alone Together – Solitude and Collaboration in Contemporary Art.”

3/3/10: Attended “First Wednesday of the Month” event at Zimmerli: exhibit by Lalla Essaydi: “Les Femmes du Maroc” Voorhees Hall Zimmerli Art Museum; I decided to bring my Byrne First-Year Seminar class to the exhibit (I did, later on in the semester).

- To become familiar with Dena Seidel’s capabilities, I attended several events featuring her video “Atlantic Crossing - A Robot's Daring Mission”, the major one being on March 4, 2010 in Rutgers Student Center, Multipurpose Room, CAC.

- I supported and visited the event “S.H.A.P.E.S.” on March 4 2010, organized by Pharmacy Governing Council (PGC) President Bo Wang (PGC) President Bo Wang to inaugurate three Health Fairs in Spring 2010 under S.H.A.P.E.S. (Student Healthcare Alliance Providing Education and Support). This initiative brings together students in health care from four health groups to organize health fairs in collaboration with Elijah’s Promise Soup Kitchen in New Brunswick. The four groups are: student pharmacists of the Rutgers School of Pharmacy, student nurses of the Rutgers College of Nursing, and the student physicians and physicians’ assistants at UMDNJ.

- With Pharmacy Dean Chris Molloy, I attended a dinner with leaders of the Pharmacy Alumni Association, together with PGC members.

- As an ex-officio member of the **University Senate**, I attended all Senate meetings I was available to attend.

- Engaged in preparing for Rutgers Day 2010.

- April 9 2010: Mindy from RU Radio interviewed me; it aired April 20 @ 7pm
- April 21 2010: Newspaper Interview by Tom Baldwin, Home News Tribune
- April 22 2010: Radio Interview WDDM ("Doom" Radio) 89.3FM 100.7FM
- April 19, 2010: WCTC interview at their studios by host Bert Baron.

- April 2010: I supported (with personal contributions) and participated the following fund-raising events organized by Engineers Without Borders (EWB)

- 4/23/10: 2nd EWB Annual Golf Outing, which raised about \$8,000.
- 4/29/10: EWB Banquet and Silent Auction

- 4/25/10: Participated in Academic Excellence Awards (for top performing Sophomores).

- 4/26/10: Participated in em[POWER]'s event “Wasteland to Homeland: A Personal Account of Transforming Lives in Landfill Communities.” (Art exhibition titled "Discarded Thoughts: Salvaged Expression of Hope" and Lecture by Phymean Noun, a CNN Hero of 2008 and the founder of the People Improvement Organization).

- 5/4/10: Attended Reception and Awards Ceremony for RU-STEPed UP for Success 2009-2010 Learning Community Programs (organized by Ghada Endick)

- 5/4/10: Attended SAS Awards event for Distinguished Contributors to Undergraduate Education
- 5/5/10: Met with Campus Deans and Officers of EWB to discuss our involvement and support.
- 5/5/10: Attended Dena Seidel's Student Film Festival
- 5/14/10: With Mike Stillwagon, we participated in RA Training Program Livingston Student Center, organized by Jeff Broggi.
- 5/16/10: Participated in the University Commencement.
- 5/17/10: Participated in the School of Engineering Convocation.
- 5/21/10: Bishop House BBQ and Hat Contest.
- 5/24/10: Participated in EWB organizational meeting for the Guatemala project in Sandy Kutzing's office; she is a Professional Engineer volunteer, serving as EWB mentor. This was the first videotaping session for the EWB video.
- 6/3/10: Met with Dean Farris of Engineering about the EWB video; he contributed \$2,000 for the project.
- 6/4/10: Met with A.V.P. Patrick Love, at his initiative, to discuss future projects.
- 6/4/10: Met with SoE Associate Dean Ilene Rosen, who introduced me to new SoE employee Anthony Welch; one of his tasks is to work with EWB.
- 6/15/10: End-of-Year Meeting organized by Mark Schuster for Deans of Students and Campus Deans.
- 6/16/10: Presented talk to RU Parents, invited by Lee Schneider.
- With Mike Stillwagon, we worked to organize events for Busch Campus Day on September 15, 2010.
- Provided Mike Stillwagon math riddles to use for a treasure hunt on Busch Campus based on GPS coordinates.
- Worked with Gadha Endick to broadcast announcement for "Salaried opportunities: Peer Mentors for STEP grant Learning communities" (January 2010)
- February-March 2010: Worked with Nathan Weiss, Assistant Director of Recruitment for Rutgers University Dance Marathon to reach out to student groups and clubs.

With **Busch Dean of Students**, participated in **community-building activities**, such as:

- "Midnight Breakfast", serving Busch Campus students just before finals (12/15/09)
- "Busch Campus Welcome Tent" at the beginning of each semester
- Serving students during RUPA's "Warming Up" Busch Campus (12/1/09)

- Visits to Residence Halls and participation in planning activities
- Mark Schuster's Holiday Party (12/18/09)

- Meetings to coordinate events and increase student-faculty interactions with Busch Campus Area Deans and Departments Chairs.

- The Rutgers chapter of Engineers Without Borders (EWB), many members of which - including the present and immediately past presidents - come from BME, has been named the premier chapter of EWB across the USA. It will also receive the Rutgers Human Dignity Award for this year. EWB-RU was nominated by Prof. Papathomas, Dean Tom Farris, and Dean Michael Stillwagon.

B.3 ACADEMIC YEAR 2008-2009

- Played an active role, with the Busch Campus Dean of Students, during the Orientation and Convocation for first-year and transfer students, August 29-31, 2008.
- Related to above: Member of the advisory team for planning the new format for the 2009 Summer Orientation for first-year and transfer students.
- Hosted a session "Secrets of Success" to provide academic guidance to first-year students by invited faculty; organized by the OUE's Office of Academic Engagement and Programming.
- With Busch Campus Dean of Students, participated in community-building activities, such as:
 - "Midnight Breakfast", serving Busch Campus students just before finals
 - "Busch Campus Welcome Tent" at the beginning of each semester
 - Serving students during RUPA's "Warming Up" Busch Campus
 - Visits to Residence Halls and participation in planning activities
 - Moderator/host of a "Jeopardy" game between the Engineering Governing Council (EGC) and the Pharmacy Governing Council (PGC)
 - RU Energy Challenge, campus-to-campus energy savings competition, co-sponsored by University Facilities and Capital Planning, Campus Deans, and PSE&G to sensitize people about energy saving.
- Meetings to coordinate events and increase student-faculty interactions:
 - with Busch Campus Area Deans and Departments Chairs
 - with Student Governing Councils and Clubs (BCC, EGC, PGC).
- Engaged student groups (Cognitive Science Club, Student Society for Stem Cell Research, Molecular Biology and Biochemistry Society, B.R.A.I.N.) in Oliver Sachs visit, October 29 2008.
- Outreach to the Busch community to sensitize students/faculty/staff on the Rutgers Against Hunger initiative.
- Organized an Open House for Rutgers alumni visiting for Homecoming (Psychology and Center for Cognitive Science faculty exhibited their results from research); contacted by Rachael Cohen (Assistant Director, Alumni Relations).
- Member of the advisory team for planning the 2009 Summer Orientation for first-year and transfer students.
- Visited Elisabeth Streb's (pioneer at the interface of science and art) Dance Studio (December 2008) to connect faculty and students during her 5-day visit at the State Theater in New Brunswick in February 2009.
- Examined requests by various groups and sponsored their activities to engage undergraduates. Some examples:
 - Unity Iftar and lecture by Professor Amaney Jamal of Princeton University on "Muslims in America since 9/11" (Center for Middle Eastern Studies), September 22 2008.

- Event on African Unity and Gender Issues (TWESE, the African Students' Union), November 22, 2008.
- American Society of Civil Engineers student chapter's participation in the Steel Bridge Competition, 2008-2009.
- Dr. Scott Kelso's Seminar, co-organized with Prof. Sungchul Ji of Pharmacy, December 9 2008.
- Department of Physics and Astronomy "Faraday Lecture" by Mark Croft.
- Planning for Rutgers Day (April 25 2009) as a member of the Programming Committee and as organizer of two exhibits.
- Organized participation of Busch faculty, students and staff in the Big Chill charity-oriented 5K run, December 2008.
- Organizing events to commemorate Darwin's Bicentennial birthday and the 150th anniversary of the publication of *The Origin of Species*. In particular:
 - Working with Prof. Gretchen Chapman (Chair, Department of Psychology) for a lecture by Prof. Leda Cosmides (U California at Santa Barbara) on February 9, 2009.
 - Working with Prof. Barry Loewer (Department of Philosophy) for a debate on Darwin between Jerry Fodor (Rutgers) and Philip Kitcher (Columbia) on February 18, 2009.
 - Working with colleagues to organize an event on SPORES, an evolution-relevant computer game.
 - Working with Dimitri Metaxas and colleagues to plan a series of four lectures on psychological, physiological and computational aspects of facial expressions to refer to Darwin's *The Expression of Emotions in Man and Animals*.
- Participating in planning for "Leave with Less" program for re-using furniture and appliances left behind in dormitories after graduation.
- Compiled Busch faculty/staff list and contacted individuals to update "information on key attributes and characteristics of workers and occupations" for higher education; contacted by O*NET.