

# Spirit of Knowledge Charter School

## Founders and Proposed Board of Trustees

*This is prepared by the founding group of the proposed Spirit of Knowledge Charter School.*

**Julia Sigalovsky, Ph.D.**, the Lead Founder, has over 30 years of experience in academia, industry and education. She was the Lead Founder and the first Executive Director of the Advanced Math & Science Academy (AMSA) Charter School, a very successful middle and high charter school in Marlborough that she opened in 2005. She has B.S. and M.S. degrees in geology and geochemistry from Moscow State University (*summa cum laude*) and a Ph.D. degree in chemistry from the Russian Academy of Sciences. Prior to creating, starting and running the school, Dr. Sigalovsky had ten years of entrepreneurial experience as founder and president of GeoTek Engineering, Inc., a geotechnical engineering consulting and drilling company. Dr. Sigalovsky's academic background includes intensive research at the Russian Academy of Sciences and the Massachusetts Institute of Technology in chemistry, geochemistry, and material sciences. She has authored or co-authored over 50 scientific publications.

**Gene Buchman** is a Consulting Educational Psychologist with over 30 years experience in Regular and Special Education. He has particular expertise in Behavior Analysis, Behavior Management, Instructional Design, and Research Methodology. He has also been a Clinical Specialist in Psychology and Designer of Adaptive Equipment for people with special needs for the Commonwealth of MA. He has extensive teaching experience, and has raised 10 adoptive and foster children. Mr. Buchman holds a MA degree in Experimental Psychology and Special Education from Goddard College, and a BA degree in Social Sciences from Harvard University. He began his undergraduate education at the Massachusetts Institute of Technology, and prior to commencing his graduate studies, worked as an Aerospace Electronics Engineer for 11 years, much of it on the Apollo Manned Spaceflight Program.

He was member of the founding group of the Advanced Math and Science Academy Charter School, and served AMSA as Upper School Administrator, Dean of Students, and Behavior Specialist.

**Marybeth Campbell** has ten years experience combined in government, public policy, public education and project management in the energy sector. She is currently the Workforce Development Program Director at the Massachusetts Clean Energy Center working with higher education, vocational schools, and community based nonprofits to develop training and workforce capacity that supports the Commonwealth's growing clean energy industry. She most recently served as the Public Education Manager for Massachusetts Renewable Energy Trust where she oversaw two education initiatives that funded projects to increase awareness among teachers, students and the public about the benefits of clean energy. Prior to joining the Trust, Marybeth worked as a senior research analyst for the Massachusetts House of Representatives Joint Committee on Telecommunications, Utilities and Energy. She is a lifelong resident of Worcester and has a BA in Political Science from Providence College.

**Sean Carroll**, a Worcester resident, wanted to become a teacher since he was in elementary school. Specifically, he wanted to be a Social Studies Teacher. He finds it to be an honor and a privilege to be allowed to teach children. Being a product of a working class family, his father being a construction worker and then a policeman, his mother being a teacher's aide and then a teacher herself, he traveled a long and winding path to reach his dream - working his way through Assumption College as a construction worker, school custodian and a host of other occupations. He earned an Associate's Degree in Liberal Arts and Bachelor's Degree with Concentration in History from Assumption College, Worcester, MA. Mr. Carroll began teaching in 1998 and had the opportunities to teach at parochial, charter, public and alternative schools. Since his wife and mother of his two young girls died after a struggle with cancer in 2004, he has spent his energies raising his daughters and has only recently returned to graduate school. He completed Graduate Courses in History and Education at Worcester State College, Worcester, MA. as well as attending professional development seminars through the Five Colleges Consortium of Amherst. He has a love of learning and shares the Spirit of Knowledge Charter School's mission to create superior schools for children to excel in.

**Michael Clark** has over 10 years experience in the IT industry and currently holds the position of Chief Technology Officer for Cinch IT, Inc. He has extensive experience in creating and managing policies for secure computing as well as Sarbanes Oxley, HIPAA, and 201 CMR regulations.

Michael is part of the Worcester based non-profit [wewantyourschool.com](http://www.wewantyourschool.com), that has collected over 50,000 pairs of used shoes for the less fortunate. He was born and raised in Worcester MA and still resides there with his wife and 2 year old daughter.

**Antonio de la Serna**, a former Worcester resident, graduated from the High School for the Engineering Professions (HSEP), a magnet school in Houston, Texas. Antonio went on to the U.S. Naval Academy, and later completed his Bachelor of Science degree in electrical engineering at California State University, Fullerton. While attending CSUF, he was president of both the Society of Mexican American Engineers and Scientists (MAES) and the Institute of Electrical and Electronics Engineers (IEEE). As a California Predoctoral Fellow and Ford Foundation Fellow, Antonio completed a master's degree in electrical engineering at the University of California, Davis and all necessary coursework for the doctoral program.

Antonio has worked for several high-tech companies in the semiconductor market in both the U.S. and Canada. He is now a senior member of the technical staff at Draper Laboratory, an affiliated laboratory of the Massachusetts Institute of Technology. Antonio has published a dozen technical papers in digital signal processing and has developed inventions in

bioinformatics, electronic security, and compiler design.

Antonio participates as a professional in MAES, SHPE (Society of Hispanic Professional Engineers), and IEEE. Within SHPE, Antonio is vice president of education outreach. Antonio is also co-chair of 2010 National Engineers Week - New England. Beyond his distinguished engineering career, Antonio has also completed 17 marathons and several triathlons.

**Darlene Frederick** is an administrator in higher education, currently working at Becker College in Worcester, MA as the Director of Student Accounts. Prior to her employment at Becker College she was the Student Accounts Manager at Quinsigamond Community College. Prior to finding her niche in higher education, she worked the private sector in the accounting/business profession. She has a passion for learning and received her Master's Degree in Business from Anna Maria College in 2004 in addition to her Associates of Art in Business Administration degree from Becker College, Worcester, and Bachelor of Science in Liberal Studies degree from Assumption College, Worcester. She has been a resident of Worcester for 25 years. She has four children, three of which are school aged.

**Calin Galeriu**, Ph.D., a Worcester resident, is an accomplished educator and father. He is teaching math at Bay Path R. V. T. H. S. and math and physics at Becker College. He has a M.A. degree in physics from Clark University and a Ph.D. degree in physics from Worcester Polytechnic Institute. He is a member of the American Association of Physics Teachers and the National Council of Teachers of Mathematics. He has co-authored a Numerical Methods textbook, and has authored or co-authored 17 scientific publications.

**Richard Langevin**, is the CEO and principle owner of Technical Innovation Center Inc. (TIC) in Worcester, MA, incorporated in 1995. TIC is a publishing, training and global consulting organization. His primary responsibilities included Administration, Finance, Marketing, Training and Product Development. He is also a Founder, of the Altshuller Institute for TRIZ Studies in 1998. The Institute is a not for profit organization to export the Theory of Inventive Problem Solving for the benefit of mankind. In 2000, Mr. Langevin became the Executive Director and Treasurer of the Institute. He attended Iowa State University on a full NROTC Regular Scholarship and graduated with a BS in Physics and Education. His diverse background in military and private sector provide a rich background and perspective.

**Eileen P. Milton** is a Staff Attorney at the Massachusetts Justice Project (MJP) in Worcester and a Worcester resident. Prior to joining MJP in 2002, she had a general law practice in Boston with a concentration in family law and the legal rights of children. As part of her practice, Attorney Milton received appointments from Boston Juvenile Court as attorney or Guardian Ad Litem for children including appointments as educational advocate. Eileen's undergraduate degree is *summa cum laude* English/Creative Writing from the University of Bridgeport, CT. Prior to law school, she served as a substitute teacher for middle school students in Cheshire, Connecticut and conducted an after-school creative writing workshop for middle school students in Darien, Connecticut. She has been a resident of Worcester for five years.

**Isidore Nosike** is the Vice President Training and Special Projects at the Martin Luther King, Jr. Business Empowerment Center, Worcester, MA as well as the President of the Martin Luther King, Jr. Business Empowerment Center II, New Britain, CT. He has over 26 years experience combined in teaching, government, banking, corporate and non-profit. He has vast experience in working with the underserved of our community by developing and providing job and occupational trainings relevant in today's workplace. Recently, he developed Health Industry Preparatory Program (HIPP) that has trained young mothers in entry level jobs in the health care industry. Majority of the graduates have acquired their state certifications and are gainfully employed. He is also involved in developing training curriculum in green energy to benefit the underserved and those wishing to make a change in career. His interest in technology and the health industry played a key role in his wife opening and operating Acclaim Home health care Agency. Before his present position, he has had experiences working as an investment banker and taught grades K-12 in his native country, Nigeria. He is a well known community leader, especially among the African immigrants and belongs to several boards in the city of Worcester.

He is a good grant writer and fund raiser. He holds a teacher's certificate, a Bachelors in Economics, Masters in Agricultural Marketing Management and an MBA from Anna Maria College, Paxton. He is well travelled and got his education in three different continents.

**Don Nisbett** graduated from the Worcester Polytechnic Institute in 2002 with a Bachelor of Science degree in Electrical Engineering. Currently an Applications Engineer with Analog Devices, Inc., he has also functioned in the capacity of New Product Development Engineer. Prior to this, he owned and operated a successful house painting business in the Worcester area for 5 years.

**Samuel Revzin**, Ph.D., a 10-year Worcester resident, during his long career, has gained experience in many facets of the education system. Starting out as a teacher and social worker, he quickly became the principal of his own innovative school. He holds a Ph.D. in Pedagogical Theory and History and has authored many articles on the subject of pedagogical development. His most extensive work, *Experimental Socio-Pedagogical Complex, a Model of a School of the Future*, can be found at the Central Library in Moscow, Russia. The pedagogical theory and evidence behind his pioneering school model is detailed in his Doctoral dissertation. Dr. Revzin was able to attain a considerable following within the domain of education reform. His school model has been implemented throughout Eastern Europe, including Ukraine, Lithuania, Estonia, Belarus, and parts of Russia. Dr. Revzin hosted an international seminar of school teachers and social workers from the United States, Germany, Norway, Poland, and Sweden.

**Valentina N. Revzin**, a 10-year Worcester resident, is a dynamic and result-oriented ESL (English as a Second Language)

teacher committed to cultivating a passion for learning, creating multicultural awareness through teaching the fundamentals of the English language. Her 12-year experience as a licensed ESL teacher includes 3 years in the Worcester Public Schools. Being a self-contained ESL classroom, inclusion and pull-out specialist, she created ESL program of study, worked as a member of Curriculum Committee during a school accreditation, developed expectations for ESL students and teachers for the district ESL Handbook, wrote standard-based education strategies and application, and worked closely with the classroom teachers and administration on the ESL program issues. Ms. Revzin has outstanding creativity and organizational skills: she organized student talent shows and implemented student Puppet Theater. She holds a Master's Degree in Education with major in English as a Second Language and Russian Language and Literature.

**Maureen Shamgochian, Ph.D.**, is currently serving as Interim Vice President for Academic Affairs at Worcester State College in Massachusetts. Dr. Shamgochian received her doctorate in Molecular and Cellular Physiology from the Graduate School of Biomedical Sciences at the University of Massachusetts Medical School in Worcester MA. She has over 16 years of experience in higher education, in progressively responsible roles, having held positions as Professor of Biology, Chair of the Biology Department and Associate Vice President for Academic Affairs prior to her current position at the college.

Over the past year under Dr. Shamgochian's leadership Worcester State College has created a new 2010-2014 Strategic Plan, implemented a new general education program, received approval for a new undergraduate Interdisciplinary Visual and Performing Arts major, reorganized the Academic Affairs Division and implemented a Dean structure at the college.

Dr. Shamgochian has done research on the physiological regulation of gene expression and the effects of ethanol on the expression of cytokines and wound healing in brain. Dr. Shamgochian is also interested in science education and has organized workshops for high school teachers and worked to advance partnerships between Worcester State College and the Worcester Public Schools.

**Suzanne M. Shaw, Ph.D.**, is a lifelong educator, having started as a classroom teacher working with students with severe/profound disabilities in an institutional setting. She has worked with all levels of students, from preschoolers to those transitioning to adulthood and has a special interest in both students on the autism spectrum and students with challenging behaviors at the middle and high school levels. She has served as a Principal, Director of Support Services, and Director of Special Education in both traditional public and charter public schools, and is interested in the dynamics of the change process. Suzanne served as a Special Education Advisor at the state level for 5 years, conducted compliance/quality reviews of special education programs, and developed the monitoring instrument used.

Suzanne worked for a member organization of the first IDEA Partnership, a special training and resource initiative of the Office of Special Education Programs of the United States Department of Education, and she has traveled the country presenting professional development sessions on the implementation of the *Individuals with Disabilities Educational Improvement Act*.

**Shinya Watanabe, Ph.D.**, is a post-doctoral research fellow at UMass Medical School in Worcester and a Worcester resident. He graduated from Soka high school in Japan. He has B.E., M.E. and PhD degrees in Bioengineering from Soka University in Japan. He is engaged in his research on gene expression and regulation in the nucleus of cells, in the laboratory of Dr. Craig Peterson, Professor and Vice-Chair of Program in Molecular Medicine at UMass Medical School.

**Yevgeniya V. Zastavker, Ph.D.**, is an Associate Professor of Physics at Franklin W. Olin College of Engineering and Affiliate Associate Professor of Physics at Worcester Polytechnic Institute. As one of the inaugural faculty at Olin, she helped in development and implementation of a new engineering curriculum that emphasizes innovative curricular and pedagogical practices. Dr. Zastavker received two years of education at the 1<sup>st</sup> Kiev Pedagogical College and a degree from a School of Music. She holds a B.S. in physics from Yale University and a Ph.D. in biological physics from MIT, which she followed by two years as a visiting faculty at Wellesley College. Dr. Zastavker's current research interests include (i) investigation of biological and synthetic self-assembling membranes; and (ii) science/engineering education with specific emphasis on the issues of gender at the intersection with innovative pedagogical and curricular practices (e.g., project-based learning). She has served on the Committee on the Status of Women in Physics of the American Physical Society since 2007. Recently Dr. Zastavker was asked to serve as a liaison to the International Working Group on Women in Physics as a part of International Union of Applied and Pure Physics. Dr. Zastavker continues to work on the issues of women and minorities in science/engineering through her research, active participation in professional societies, and her involvement in community including STEM Academy for minorities at Olin and others.