Harold R. "Skip" Garner

HOME/ UNIVERSITY /PRIVATE BUSINESS ADDRESS:

182 Iron Works Ln Harmony, NC 28634 (214) 924-8364 Cell skipgarner@gmail.com

PROFESSION: Experimental Research Physicist and Biomedical Researcher.

SECURITY CLEARANCE: DoD Secret (no longer active)

DOE 'Q' (no longer active)

MARITAL STATUS: Married to Kim Menier, Medical Anthropologist, Brand Planner, Consultant and CEO

EDUCATION:

B.S. (Nuclear Engineering) University of Missouri, Rolla (1976)

M.S. (Nuclear Engineering) University of Wisconsin, Madison (1978)

Ph.D. (Plasma Physics) University of Wisconsin, Madison (1982)

P.E. (Nuclear Engineering, honorary) University of Missouri, Rolla (1994)

PhD. THESIS TOPIC:

"Low-Frequency Turbulence, Particle and Heat Transport in the Wisconsin Levitated Octupole" written under the direction of Professor R.S. Post.

WORK EXPERIENCE:

1974 to 1976 - Announcer/Technician at KMNR FM Radio, Rolla, Missouri

1976 - Nuclear Engineer, INSITE Program at Argonne National Laboratory, Chicago, Illinois

1976 to 1982 - Research Assistant in Plasma Physics at University of Wisconsin

1979 to 1980 - Technical Advisor/Consultant for LaFollette, Anderson, Sinkin, and Munson Law Firm, Madison, Wisconsin

1982 to 1986 - Senior Scientist for Fusion Division at General Atomics in San Diego

1986 to 1994 - Appointed to the Institute for Development & Application of Advanced Technology at General Atomics

1990 to 1994 - Scientific Advisor and founder of HELIX, biotech spinout of General Atomics

1991 to 1993 - Principle Scientist and founder of the Biosciences Division, General Atomics

1993 to 1994 - Senior Staff Scientist for the Biosciences Division, General Atomics

1994 to 1998 - Associate Director, Genome Science and Technology Center, UTSW

1999 to 2002 - Program Chair, Biomedical Engineering, UTSW/UTA

1999 to 2006 - Founding member of the Center for Biomedical Inventions, UTSW

1994 to 2009 – P. O'B Montgomery Distinguished Chair in Developmental Biology, Professor of Biochemistry and Internal Medicine, McDermott Center for Human Growth & Development, founding member of the Division of Translational Research, Internal Medicine Department, UTSW

2009 to 2012 – Executive Director, Virginia Bioinformatics Institute, Virginia Tech, Professor, Depts. of Biological Sciences and Computer Science

2012-2015 – Medical Informatics and Systems Division Director, Virginia Tech, Professor, Depts. of Biological Sciences and Computer Science

2009-2019 – Professor of Medicine, Virginia Tech Carilion School of Medicine

2007-2020 - Chief Scientist, Heliotext

2011-present - Chief Scientist, Orbit Genomics (previously Genomeon)

2015-2018 - Founder and Chief Scientist, Quanta Lingua and Comperity

2015-2019 - Founding Executive Director, Office of Medical Informatics, Translation, Training and Ethics

2016-present – Professor of Biomedicine, Edward Via College of Osteopathic Medicine (VCOM)

2016-2022 - Executive Director, Primary Care Research Network and the Center for Bioinformatics and Genetics, VCOM

2017-present - Senior Research Member, Gibbs Cancer Center

2018-2022 – Associate Vice Provost for Research Development, VCOM

2022-present – Assistant Vice Provost for Research, VCOM

2019-2022 – Interim Associate Dean for Biomedical Affairs, VCOM Carolinas

2022-2023 - Associate Dean for Biomedical Affairs and Research, VCOM Carolinas

2022-present – Founder and Director, Dark Matter Habitat, 501c3

ORGANIZATIONS (past and present):

AAAS, AACR, Biophysical Society, American Physical Society, HUGO, IEEE, The Cousteau Society, Fusion Power Associates, Japan Karate Association, Planetary Society, San Diego Zoological Society, Tau Beta Pi, Who's Who, Who's Who of California, Fine Woodworkers Association, Sigma Xi, American Association of Cancer Researchers, American Institute for Medical and Biological Engineering (AIMBE), American Cancer Society, Society for Genome Biology and Technology, International Society of Computational Biology

HONORS/PROFESSIONAL ACTIVITIES:

Fellow of the American Institute for Medical and Biological Engineering Charter member of the Academy of the School of Mines and Metallurgy and Order of the Golden Shillelagh, University of Missouri - Rolla

Advisor and program reviewer (current or previously) for: Drosophila Genome Center Advisory Committee, Berkeley, CA; Program reviewer for the National Institutes of Health, National Center for Human Genome Research, National Cancer Institute, SBIR program, Sequencing Advisory Group, NIH MIDAS steering committee; Program reviewer for the Department of Energy, Office of Health and Environmental Research, DOE Human Genome Subcommittee, BERAC; Steering Committee on Analytical Instrumentation for the National Science Foundation, reviewer for National Science Foundation; reviewer for NASA Mars Rover and Scout Missions; advisor to the National Research Council; Advisory Board, North Texas Life Science Society; reviewer for Genome Canada, reviewer for State of South Carolina, U.S. Department of State, NIH Director's Pioneer Awards, NIH Director's New Innovator Awards, John D. and Catherine T. MacArthur Foundation, Dutch Cancer Society, UK Medical Research Council, Qatar National Research Fund (QNRF).

Ex-member of the NIH/NCI Cancer Biomarkers (CBSS) study section.

Chair of study section for Susan G. Komen Breast Cancer Foundation

Chair of the NASA ASTID review group, 2009

Journal reviewer for: Genomics, Nature Biotechnology, BioTechniques, Review of Scientific Instruments, IEEE Spectrum, Nature Genetics, Nature Communications, Oncology, Bioinformatics, Biomed Central Genomics, Nucleic Acids Research, Royal Society of Chemistry Journals, PNAS, IEEE Journal of Biomedical and Health Informatics.

Associate Editor for IEEE Engineering in Medicine and Biology, Scientific Computing and Automation, IEEE Transactions on Automation Science and Engineering, Editorial Board of the Journal of the Society for Experimental Biology and Medicine

Scientific Advisory Board for Stratagene (no longer active), TissueGen (no longer active), MWG (Germany, no longer active), GeneTraks (Australia, no longer active), Vitruvius Biosciences (no longer active), The Texas Japan Genomics Corporation (Japan, no longer active), BioAutomation, Nimblegen, Inc. (no longer active after acquisition by Roche), Vindauga Ventures (no longer active), BioCemi (no longer active), Cloud Pharmaceuticals (no longer active), Iridia

Founder of Light Biology (acquired by Nimblegen, now Roche), BioAutomation (acquired by LGC), Xanapath, LLC (no longer active); HelioText, LC (no longer active); Deltateq Instruments, Inc (no longer active); Genomeon/Orbit Genomics;

Founding member of MacroGenics, Inc.

Founder of United Community Bank (http://www.unitedcommunity.com/), acquired 2013

University Committees on Internet Security, BME JGSC, REISSCO (electronic resources advisory committee), Clinical Registry (while at UTSW)

External Advisory Committee, Carolina Center for Genome Sciences, UNC

Advisory Council, Green Center for Systems Biology Science, UTD

Advisory Board of the Hong Kong – Europe New Life Science Seed Capital Fund

Invited Lecturer, King's College Summer School, London – "Bioinformatics for Geneticists"

Finalist, 2008 Tech Titan Awards, Metroplex Technology Business Council

Postdoctoral Mentor of the Year, 2008

Advisor, Department of Health and Human Services, 2009

Reviewer, Singapore Biomedical Research Council, 2009

Finalist, 2009 Tech Titan Awards, Dallas Metroplex Technology Business Council

Adjunct Professor, Biomedical Engineering, University of Texas - Arlington

Board, Blacksburg Electronic Village, Inc.

Academic Council, Virginia Tech Carilion School of Medicine

Virginia Tech 6-year Strategic Planning Committee

Fellow of the Virginia Tech Honors Residence College

Scieneering (HHMI) Advisory Board

Founding member of Virginia Tech Autism Center

Member of working group at the Virginia Economic Development Partnership

Advisor/presenter, National Academies of Science, February 2013

Panelist and member, New York Academy of Sciences, April 2013

Board of Advisors, Scientific American

Board member, VaBio and VaBio Foundation

Scifoo, 2014

Member, Virginia Governor's Committee on Bio Business

Chair, NIH/NCI Informatics Technology for Cancer Research (ITCR) Study Section

Consultant, National Academies of Medicine

Winner (with Fred Rawlins and Cameron Sumpter), AACOM SOME Innovation in Medical Education Award – Marguerite Elliot Award 2020

Ordained minister, Universal Life Church

OTHER PROFESSIONAL ACTIVITIES (past and current):

Organizer of the Human Genome Automation Special Interest Group, with Glen Evans (Salk) and Jeff Quint (Beckman Instruments).

Outreach Coordinator for Biosciences Division at General Atomics.

Executive Advisory Committee for the Small Manufacturers Automation Resource and

Training Center at the St. Louis Community College.

- Chairman of the Advisory Board for Kid Lab, a Science Program for Young People in San Diego, California.
- Lecturer in High Temperature Superconductivity, Advanced Materials and Biotechnology for Kid Lab in San Diego, California.

RESEARCH SPECIALTIES:

- Plasma Physics International Cooperation and Program Principle Investigator in Mirror Confinement Systems, ICRF and ECRF Heating, Plasma Diagnostics, Tokamak Edge Physics, Pump Limiters and Divertors, Advanced Fuel experiments on Levitated Octupole, Stellarators, Mirror Cusp Experiments, Plasma-Acoustic Interactions, Plasma Based Low Energy Neutral Sources, Transport, Tandem Mirror Physics
- Biotechnology Microwave Spectroscopy of Macromolecules (DNA, Proteins, etc.),
 Microwave and Spectroscopic Diagnostic Development, Resonant Acoustic Damping in
 DNA, Recombinant DNA, PCR Amplification, Optical Diagnostic
 Development/Commercialization, Bioreactors, YACs, Superfluorescence, DNA
 Sequence Analysis/Informatics, Automation/Robotics, Protocol/Methods development,
 STM/AFM, Hyperspectral Imaging, Biological Arrays, Biomedical Text Data-Mining,
 Pharmaceutical Development, Evolution, Proteomics, Tissue Engineering, Drug
 Discovery
- Genetics/Genomics High throughput sequencing, microarray development and analysis, cancer biomarker discovery and pursuit, pathogen/host forensics
- Computer Science Expert Systems Application/Knowledge Base writer, Data Acquisition, Fortran, Assembler, C, ADA, Operating system use from Macintosh to Linux Clusters, Registered Macintosh and Hewlett Packard product developer, Parallel processing using transporter arrays and superparallel computers and clusters, Data Mining
- Optics Hyperspectral Imaging, Holographic Projection/3D TV, spectrophometric instrumentation, Variable Spectrum Sources, UV image projection
- Accelerator Physics Design/Construction/Testing of IXRS, a new Microwave driven electron cyclotron
- Acoustics Acoustic Levitation, Particle Agglomeration, Acoustic modes in solids, Acoustic Enhanced Plasma Breakdown, SAWs, Chromosome Sorting
- High Temperature Superconductivity Solid State NMR and wire coating
- Electronics High and Low Frequency Analog, Digital, High Voltage, High Power, Pulsed, 3rd Class Radio Telephone Operator
- Microwaves High Power Plasma Heating and Diagnostics to 140 GHz, Homodyne and Heterodyne Systems, component development
- Lasers Pulsed and CW lasers for plasma diagnostics, Excimer laser development
- Reactor Physics Reactor Operations and Fermi Chopper design/construction/use at University of Missouri Research Reactor
- Radiation Shielding/Monitoring Instructor for a laboratory class at University of Wisconsin, Madison
- Submarine Stealth and Communications, Thermonuclear Weapons, UAVs, SDI –
- Nanotechnology Nanopatterning driven cell response, Nanotube vectors, QD applications

Forensics and Paternity – Expert witness, consultant

- Patent Novelty Assessment, Challenges Expert witness, consulting
- Scientific Publication Ethics Expert, lecturer, consulting
- Grant/Contract Fraud, Integrity and Ethics Expert witness, consulting, Qui Tam
- Syndromic Surveillance and Response Pandemic prediction

PUBLICATIONS:

My publications list includes books, papers in refereed journals, invited talks, non-refereed journal papers, internal reports at General Atomics, Institute of Plasma Physics at the University of Nagoya-Japan, the University of Wisconsin, and conference abstracts.

PATENTS:

Methods and Systems for Microsatellite Analysis, provisional filed April 2019, PCT/US20/29145 filed; June 16, 2022 as Publication No. US-2022-0189583-A1; also published in China, India, Hong Kong, Japan

ICD Logging System (with Fred Rawlins), provisional conversion filed June 22, 2018; European Patent Office has published patent no.EP4016544A1

Somatic variation quantification of genomic stability as a diagnostic for DNA repair deficiencies, (with Zalman Vaksman), USPTO provisional, 2014, converted, 2015

Methods and Compositions for Identifying Global Microsatellite Instability and for Characterizing Informative Microsatellite Loci, (with McIver and Tae), PCT filed December, 2013

Methods and Compositions for Identifying Global Microsatellite Instability and for Characterizing Informative Microsatellite Loci, provisional application 61/737,919 filed December 17, 2012

Methods for discovering molecules that bind to proteins, Application No.61/452,025 Global germ line and tumor microsatellite patterns are cancer biomarkers, US UTSD-2177 Method and composition for the treatment of cardiac hypertrophy (with Mounir Errami) – US 2008/0305186 A1

A computer-based method for creating collections of sequences from a dataset of sequence identifiers corresponding to natural complex biopolymer sequences and linked to corresponding annotations – 7,065,451

Computer Program products, Systems and Methods for Information Discovery and Relational Analyses – Filed, Japan

Holographic Projector- 7,738,151

Informational Discovery and Relational Analysis using the IRIDESCENT system – Filed in US, Japan and Australia

Prediction of disease-causing alleles from sequence context – Filed

A program for Microarray Design and Analysis – 7,065,451

Digital Micromirror Holographic Projector – 6,646,773

eTBLAST, a text search tool - Filed

Identification of Chemically Modified Polymers – Filed

Devices, Methods and Systems for High-resolution High-throughput Genetic Analysis – Filed

Optical Correlator using Spatial Light Modulation Illumination (with R. Gale, TI) – 6,819,807

Variable Spectrum Synthesizer – 6,657,758

Polymorphic Repeats in Human Genes – 6,472,154

Hyperspectral Imaging Microscope – 6,337,472

Digital Optical Chemistry Micromirror Imager – 6,295,153, 7,785,863

Digital Optical Chemistry Micromirror Imager – Divisional Filed

Digital Optical Chemistry Micromirror Imager – Conversion Filed

Hyperspectral Slide Reader – 6,160,618

Automatic Sequencer/Genotyper Having Extended Spectral Response - 5,871,628 and 6,427,126

Micropipette Adaptor for Spectrophotometers - No. 4,991,958 and NI-48394 Taiwan

- Coaxial Microwave Absorption Diagnostic No. 4,990,858
- Spectrophotometer to Flurometer Convertor (with L. Peranich) No. 5,094,531
- Micropipette Adaptor for Spectrophotometers with Temperature Control No. 5,092,674
- Micropipette Adaptor for Spectrofluorometers No. 5,104,218
- Assembly for converting a Spectrophotometer to a Fluorometer No. 5,166,743
- Micropipette Adaptor with Temperature Control for PCR Amplification No. 5,241,363
- Micropipette Adaptor for Spectrofluorometers having an Integrated Optical System -
- Coated Capillary Tube for Controlled Release of Reagents (with O. Tuason, L. Peranich) No.5387526
- Automated Method for Determining the Base Sequence of a Nucleic Acid Chain (with M. Alringer and G. Shephard) -
- Multi-Well Microtiter Tray (with G. Shephard) US patent to issue, No. 0922905 (France) and No. M 90 03 555.8 (Germany)

RESEARCH FUNDING HISTORY:

- 1983 1988, DoE contract for International (Japan) Plasma Physics Studies, initially \$150k/year to ~\$650k/year.
- 1992 1994, NIH grant, High-Throughput Screening of YAC Libraries, as part of the program project grant, Glen Evans (The Salk Institute), director, ~180k/year, my part.
- 1992 1995, NIH grant, High-Throughput HGP Automation System, ~\$588k (3 year).
- 1994 1998, co PI with Glen Evans, NIH GESTEC grant, UT Southwestern Genome Center, ~\$16M, (4 year), \$1M/year my part
- 1995 1997, PI "Optoelectronic Hybridization Microsensor", Whitaker Foundation, ~800k\$, (4 year).
- 1996 1997, co PI with Glen Evans, DoE grant, A PAC end-sequence Database for Human Genomic Sequencing, \$100k/yr my part
- 1996 1997, PI, Texas Instruments grant, Optical Hybridization Microsensor and Beyond, like in kind value, \$100k
- 1997 2000, co PI with Ron Butow, NIH/NCI R01 grant, The Large-scale Functional Analysis of the Yeast Genome, \$150k/yr (3 years)
- 1998 2000, co-PI on a Developmental Grant as part of UTSW/MD Anderson cancer SPORE, John Minna, MD on NIH/SPORE grant, ~\$130k/year
- 1998 2002, PI on sponsored research agreement with Beckman Instruments, like in kind value of \$500k
- 1998 2000, PI on DOE grant, Technology Support for JGI and SPF, \$493k, (2 years)
- 1999-2001, Investigator on Reynold's Foundation Cardiac Disease Center grant, \$24M (4 years), my part \$600k/year (4 years)
- 1999 2004, PI on Software and Instrumentation for the Identification of Cancer Genes, NIH/NCI grant, \$625k/year (3 years)
- 1999 2001, PI on SNooP-A directed search for genetic variation, State of Texas Advanced Research Projects grant, \$198k/yr (2 years)
- 1999 2001, Co-PI on Hyperspectral Microscopic Imaging, State of Texas Advanced Research Program, \$143k/year (2 years)
- 2000 2004, PI Genomics and proteomics of cell injury and inflammation, NIH/NHGRI program project grant, \$1.05M/year (3 years)
- 2001 2003, PI Phase-controlled Imaging with Digital Light Processing, Texas Advanced Research Projects grant, \$125,000/year (2 years)

- 2002 2009, PI, NIH/NCI Lung SPORE Bioinformatics Core, ~\$120k/year (5 years, renewal submitted for next 5 years)
- 2002 2009, PI, NIH/NHGRI Proteomics Center, ~\$530k/year (7 years)
- 2002 2009, Hudson Foundation, \$40k (year 1), \$60k (year 2)
- 2002 2005, Investigator, BioThreat Center, UT Austin, Steven Kornguth, PI., \$20k/year
- 2003 2006, PI for NIH R01 grant, Microsatellites and their role in cancer, \$260k/year (3 years)
- 2003 2009, PI for Computational Biology Core for Midwest Regional Center of Excellence, NIH/NIAID, \$350k/year
- 2006 2007, Phase I NASA SBIR with Lynntech, Monitoring stress on high altitude balloon materials using hyperspectral imaging, \$100k
- 2007 2010, NIH/NLM R01 grant, Duplicate and Plagiarized Articles in Medline, \$1M
- 2007 2008, Three Phase I SBIRs with Lynntech, Monitoring stress on parachute materials using hyperspectral imaging (NASA), and Protein ligand discovery process (US Army), NIH/NCI Ligand production for cancer research, \$100k
- 2007 2010, Project leader, Foreign Animal Zoonotic Disease Center, Texas A&M (Department of Homeland Security funded), \$900k
- 2008 2011, Phase II SBIR with Lynntech, Protein ligand discovery process, US Army, \$1M
- 2010 2013, NIH/NHGRI R01, Microsatellite analysis of 1000 Genomes Project Sequence, ~\$270k/yr, 2 years.
- 2011- 2016, NSF/STCI, Determining Feasibility and Scalability of a Life/Medical Science Hybrid-core Based Platform, ~\$400k/yr. 3 years
- 2011-2014, NIH/SBIR phase II with Lynntech, \$1M
- 2012-2015, Commonwealth of Virginia, Genetic Reassessment after Induction in Advanced Non-Small Cell Lung Cancer, \$100k
- 2013-present, Genomics of Meduloblastoma with Dr. B. Rood, \$200k+ (several
- smaller grants), sub to Children's National Medical Center
- 2015-present, Carilion Clinics RAP grant with Dr. S. Almahameed, Microsatellite Biomarkers for Atrial Fibrillation, \$50k
- 2016-present, Bradley Engineering Foundation grant, \$1.5M
- 2016-2017, REAP grant in Autism, \$50k
- 2016-2017, REAP grant in Mass Casualty Response, \$50k
- 2017-2018, REAP grant in Anatomy Genomics, \$50k
- 2018-present, REAP grant in Alzheimer's disease diagnosis and treatment optimization, \$50k
- 2018-2020, HHS Office of Research Integrity grant, \$200k
- 2020-present, Lung Cancer Risk Diagnostic trial, Orbit Genomics
- 2020-present, Pancreatic Cancer, Type II Diabetes Risk Diagnostic development, Orbit Genomics
- 2022-present, Syndromic Surveillance, Defense Intelligence Agency, \$140k

PHD, MD AND MASTERS STUDENTS MENTORED:

Kari Kukanskis - M.S., BME 1998, Molecular Staging

Jeff Zavaleta - UT Austin Undergraduate Thesis Reader, 1998, UTSW Med School

Ashwine Pande Patil - M.S., BME 1999, Biosciences Dept., Univ. of Osaka

Greg Miller - PhD. BME 1999, Cumbre, Inc.

Jeff Zavaletta – M.D., 2000,

Raynal Ruch – M.D., 2000,

Varshal Dave – MS, Cell and Molecular Biology, 1000, Axon, Inc.

Robert Balog - Ph.D., BME and Cell and Molecular Biology, 2003, US Army Active

Amit Kulkarni – M.S., BME, 2002, Rosetta Informatics/Merck, Inc

Trey Fondon - Ph.D., Biophysics, 2003, post-doc, independent fellow, UTSW

Andrew Boyd – M.D., 2003, Assistant Professor, University of Chicago

Jonathan Wren - Ph.D., Cell and Molecular Biology, 2003, Univ. of Oklahoma

Elizabeth Cronin - Ph.D. BME, 2003 (with Kevin Nelson), new mother

Monica Hovarth – Ph.D. 2004, Cell and Molecular Biology, UTSW, NIEHS

Steve Crozier – Ph.D., Biophysics, UTSW (dropped out to start company)

Ryan Weil - Ph.D. 2006, Cell and Molecular Biology, UTSW, Roche

Nishanth Marthandan – M.S. 2006, BME, UTSW, bioinformaticist

Jose Cabrera – M.S., 2006, Biomedical Communications, UTSW, free-lance in Dallas

Dipanjana Bhattacharya – Ph.D., Biophysics, UTSW

Robert Longnecker – M.S., BME, UTA (changed to non-thesis, 2007)

Vinayak Kulkarni – M.S. 2007, BME, UTSW

Amruta Joshi – M.S., BME, UTA

Sasidhar Katari – M.S., BME, UTA

Dipen Rana - M.S., BME, UTA

Sandhya Mitnala - M.S., BME, UTA

Neil Kumar – MD with research distinction, UTSW, now at Hopkins

Shamira Shallom – Ph.D. 2012, GBCB (Genomics, Bioinformatics, Computational Biology), Virginia Tech, NIH

Iccha Sethi – M.S. 2012, Computer Science, Virginia Tech, now at Rackspace

Jonathon Freezer - M.D., VTC School of Medicine, now at Geisinger Medical Center

Caroline K. Osborne – M.D. candidate, VTC School of Medicine, deceased

Elizabeth Glazier - M.D., VTC School of Medicine

Rebecca C. Kirschner – M.D., VTC School of Medicine

Heather Lewenczuk – PhD candidate, GBCB, Virginia Tech

Ashwin Puthige – MS, Virginia Tech

Zalman Vaksman – PhD, GBCB, Virginia Tech, now at Penn

Karthik Valmarugan - PhD, GBCB, Brigham and Woman's Hospital

POST DOCTORAL FELLOWS MENTORED:

John "Trey" Fondon – Post-doc, Bioinformatics/Genetics (now, UTA faculty)

Yuri Belosludtsev – Post-doc, Chemistry (now CEO of Vitriviouis Biosciences)

Simon Rayner – Post-doc, Instrumentation (now CSO of BioAutomation)

Ping Li – Post-doc, Bioinformatics (current association unknown)

Kevin O'Brien – Post-doc, Instrumentation (now at Merck, Inc.)

Jim Yan – Post-doc, Bioinformatics (now at Almac Diagnostics)

Shawn Roach – Post-doc, Chemistry (now at EyeTech)

Alex Pertsemlidis – Post-doc, Bioinformatics (now Greehey Children's Cancer Research Institute)

Kevin Tang – Post-doc, Bioinformatics (now at the CDC)

Jing Shen – Post-doc, Bioinformatics (now at UTSW microarray core)

Yun Lian – Post-doc (MD), Bioinformatics (now independent consultant, Dallas)

Tracy Xu – Post-doc, Bioinformatics (now at PA school at UTSW)

Evgeni Poliakov – Post-doc, Instrumentation (now at Redstone Arsenal)

Elizabeth "Lena" Flood – Post-doc, Molecular Biology (now at Nomadics)

My-Hanh Nguyen – Post-doc, Bioinformatics and Genomics (now at Roche)

Ellen King – Post-doc (MD), Bioinformatics and Drug discovery (pathology resident, UTSW)

Mike Huebschman – Post-doc, Instrumentation (now staff at UTSW)

Wayne Fisher – Post-doc, Bioinformatics (now staff at UTSW)

Mounir Errami – Post-doc, Bioinformatics (now MD student at UTSW)

Cristi Galindo – Post-doc, Genomic data interpretation (now at Vanderbilt)

Jenni Weeks – Post-doc, Genomic data analysis and pathogen detection (now, St Jude Children's Research Hospital)

Hongseok Tae – Post-doc, Bioinformatics and deep sequence analysis (now at Caris)

Jasmin Bavarva – Post-doc, Microsatellite analysis of mutagen exposures (now at Leidos)

Natalie Fonville - Post-doc, Role of microsatellites in neurological disorders, patent agent

Wyatt McMahon - Post-doc, Bioinformatics and data interpretation analysis (now faculty at John's Hopkins)

Enusha Karunasena - Post-doc, Bioinformatics and data interpretation analysis (now consultant, Maryland)

Zalman Vaksman – Post-doc, Bioinformatics and genome stability (now at Penn)

Nick Kinney – Post-doc, Bioinformatics and Genomics (now at Orbit Genomics)

Robin Varghese – Post-doc, Bioinformatics and Genetics, VCOM

Ramu Anandakrishnan – Post-doc, Bioinformatics and Mathematics, VCOM

Karthik Valmarugan - PhD, Bioinformatics and Genetics (now at Brigham & Woman's)

TEACHING and LECTURING:

UTSW:

Div. of Cell and Molecular Biology Core Course – Bioinformatics

Human Genetics – Bioinformatics

Introduction to Biomedical Engineering – Biocomputing and Technology

Lab Principles in Biomedical Engineering – Bioinformatics

Ethics

Proteomics Special Course

Experimental Approaches to Human Biology and Disease (UTSW MD/PhDs)

Summer Workshop for Div. of Cell and Molecular Biology – Microarrays

UTSW Library course – Text data searching and mining

Other:

Invited Lecturer, 2007, 2009 and 2013, King's College Summer School, London:

"Bioinformatics for Geneticists", typically teaching 5 one-hour sections in a week.

CME instructor, Oncology and Cardiology Departments, Carilion Clinics, 2011-2012

Lecturer, Masters in Management of Clinical Informatics program, Duke, 2012-2014

Lecturer, Responsible Conduct of Research course, Weill Cornell Medical College, 2013-2015

Virginia Tech:

Lecturer in Medical School, various Virginia Tech courses

System Biology, 2015

VCOM:

Pharmacogenomics and Precision Medicine, 2016

Tools of Genetic Medicine I, II, 2016

CME Genetics: Defining Reliable Genetic Testing and Information in the Prediction and Treatment of Disease

CME Genetics: Genetics and Personalized Medicine: What is the Future?

GME: Scholastic activity and how to do research for medical residents

Created Self Directed Learning modules for DO with Research Distinction Program and 3rd/4th year Research Rotation

HOBBIES:

Karate (Shotokan - presently 1st degree Black Belt and Instructor), Aikido, Woodworking, Photography, Camping, SCUBA Diving, Surfing, Snowboarding/snowbiking, Bicycling, Oil Painting, Long range target shooting, Dog, Horse, Bird and Lost Soul Rescue.

01-24-2023