Jennifer W Weller, PhD

Professional Preparation.

Institution	Major	Degree	Year
University of Montana	Chemistry	B.S.	1979
Oregon State University	Biochemistry and Biophysics	MS	1986
University of Montana	Biochemistry	PhD	1990
Michigan State University/PRL	Molecular Genetics	Post-doc	1990-1992
The Carnegie Inst. for Plant Biol. at Stanford	Molecular Genetics	Post-doc	1992-1994

Appointments.

2012- present	Associate Professor (tenured), Department of Bioinformatics and Genomics, University of North Carolina at Charlotte, NC
2007-2012	Associate Professor, Department of Bioinformatics and Genomics, University of North Carolina at Charlotte, NC
2002-2007	Associate Professor, Department of Bioinformatics and Computation Biology, George Mason University, VA
2002-2003	Director of Bioinformatics for the Epidemic Outbreak Surveillance project, USAF/SGX, Falls Church VA, 22041(IPA assignment 80%)
2000-2002	Research Assistant Professor, Virginia Bioinformatics Institute, Virginia Tech, Blacksburg VA.
2000	Adjunct Professor of Biology, University of New Mexico (2000).
1999-2000	Science Program Leader for Structural Genomics and for Gene Expression, NCGR, Santa Fe, NM.
1994-1999	Scientist and Senior Scientist at the PE Biosystems Corp. (also PE AgGen, PE GenScope and Celera Applied Genomics), Foster City CA.

Products (maximum of 10).

1. Thompson, K.T., Deshmukh, H., Solka, J.L., Weller, J.W. (2010) "A Whitebox Approach to Microarray Probe response Characterization: the BaFL Pipeline" BMC Bioinformatics 10:449.
2. Gharaibeh, R.Z., Newton, J.M., Weller, J.W., Gibas, C.J. (2010) "Application of Equilibrium Models of Solution Hybridization to Microarray Design and Analysis" PLoS ONE: doi:10.1371/journal.pone.0011048.
3. Paszko, C. and Weller, J.W. (2011) "Computerized LIMS" The European Pharmaceutical Contactor (EPC magazine), Spring 2011 pp 64-67 (invited).
4. Overall, C.C., Carr, D.A., Tabari, E.S., Thompson, K.J., Weller, J.W. (2011) "ArrayInitiative – a tool that simplified creating custom Affymetrix CDFs" (BMC Bioinformatics, accepted with revision).
5. Baciu C, Thompson KT, Mougeot JL, Brooks BR, Weller JW (2012) "The LO-BaFL method and ALS microarray expression analysis" BMC Bioinformatics 13:244.
6. The DataFATE code Web site (NSF funded) is maintained although development has stopped : http://webpages.uncc.edu/~dcarr10/DataFATE_html/DataFATE_Home.html (revised 2013)
7. A list of Affymetrix SNP6.0 probes whose binding is confounded by the way the restriction fragments are generated is maintained here http://webpages.uncc.edu/~dcarr10/SNPStudy/ (revised 2013)
8. An array data set from ovarian cancer samples was submitted to the GEO repository: GSE29156, Tickle et al (2012); a high-throughput sequencing sample set was submitted to the SRA repository with two class groups as co-authors (2015): SRA:
9. BSL3 Facilities and BSL3 Safety Manuals for the UNC Charlotte BSL3 facility (available on UNCC Biosafety dept. Web site), 2015.
10. MinSeqE: Minimal Information about a Microarray Experiment (from the FGED society, submitted to PLoS Bioinformatics in 2015).

Synergistic activities. (maximum of 5, including innovations in teaching and training, broadening participation of groups, service outside of immediate organization

1. Co-director of the Biotechnology, Biodiversity and Bioinformatics (B3) Summer Science camp at Olympic High School of Biotechnology and Health. http://webpages.uncc.edu/~jweller2/pages/SummerCamp2013/SummerCamp2013_Home.html
2. Board memberships: member of the Scientific Advisory Board of the American Chestnut Foundation; Vice President, Board Functional Genomics Data (FGED) Society; Member of the Scientific Advisory Board for Gaston College.
3. Charlotte Research Scholars undergraduate research mentor for Christian Gibson in 2013.
4. High school senior science project mentor in 2012 and 2013 for Jayden Walsh.
5. Professional Society Meetings organized: principle organizer of the Workshop on Next-Generation Sequencing 2011; Session Chair for the International Symposium on Bioinformatics Research and Applications (ISBRA) 2013, Organizing Committee for FGED2015, Big Data and Functional Genomics.

Collaborators & other affiliations.

1. Collaborators *(name, affilitation)*

Dr. Cynthia Gibas	Department of Bioinformatics and Genomics, UNC Charlotte
Dr. Sara Levens	Department of Psychology, UNC Charlotte
Dr. Paul Sisco	The American Chestnut Foundation
Dr. Andrew Carr	Advanced Technologies Labs,LLC (ATL), Pinehurst, NC
Mr. Steve Barilovits	The American Chestnut Foundation
Dr. Ron Taylor	Pacific Northwest National Labs, Richland, WA
Dr. Roger Cubicciotti	NanoMedica, Winston-Salem, NC
Dr. Keith Bonin	Dept of Physics, Wake Forest University, Winston-Salem, NC
Dr. Martin Guthold	Dept of Physics, Wake Forest University, Winston-Salem, NC
Mr. Jason Gagliano	Dept of Physics, Wake Forest University, Winston-Salem, NC
Ms. Jeanne Smith	Olympic High School CMS, Charlotte, NC
Ms. Erica Putnam	Olympic High School CMS, Charlotte, NC
Dr. Jennifer Pagan	DotMetrics, Charlotte NC
Dr. Cathy Moore	Department of Bioinformatics and Genomics, UNC Charlotte
Mr. Jonathon Shea	Department of Bioinformatics and Genomics, UNC Charlotte
Dr. Chris Overall	Pacific Northwest National Labs, Richland, WA
Dr. Francis Ouellette	Dept of Cell and Systems Biol, U of Toronto, Canada
Dr. Alvis Brazma	European Bioinformatics Institue, Wellcome Trust, Hinxton UK
Dr. Roger Bumgarner	Dept of Microbiology, U of Washington, Seattle, WA
Dr. Cory Brouwer	Department of Bioinformatics and Genomics, UNC Charlotte
Dr. Amy Lincourt	Dept. of General Surgery, Carolina's Health System, Charlotte
Dr. Anthony Fodor	Department of Bioinformatics and Genomics, UNC Charlotte
Dr. John Quackenbush	Dept Comp Biol and Stats, Harvard U. Boston, MA
Dr. Steve Chervitz-Trutane	Personalis, Menlo Park, CA
Dr. Deb Niemeier	Rehabilitation Research Lab, Carolina's Health System Charlotte
Dr. Eric Wikstrom	Dept of Kinesiology, UNC Charlotte
Dr. Chris Stoeckert	Dept of Genetics, Penn School of Medicine, Philadelphia, PA
Dr. Chris Bradburne	Applied Physics Lab, Johns Hopkins U.
Dr. Chris Paszko	Accelerated Technology Laboratories, LLC, West End NC
Mr. Don Kolva	Accelerated Technology Laboratories, LLC, West End NC
Dr. Dan Janies	Department of Bioinformatics and Genomics, UNC Charlotte
Dr. Mark Lyte	Health Sciences Center, Texas Tech U, Lubbock TX

2. Graduate advisors

MS: Dr. Kensal E Van Holde, Oregon State University (retired)
PhD: Dr. Walter E. Hill, University of Montana (retired)
Post-doctoral mentor: Dr.Shauna Somerville, Professer University of California at Berkeley

3. Advisees.

Postdoctoral (5)
Dr. Karen Schlauch (Director of Bioinformatics at U-Nevada Reno).
Dr. Sunita Kumari (CSHL in the Ware group)
Dr. Chris Bradburne (Applied Physics Lab at Johns Hopkins University).
Dr. Andrew Carr (Director of Bioinformatics at Accelerated Technology Labs)
Dr. Kevin Thompson (Mayo Clinic in Rochester, MN).

PhD (12)	MS(11)
Peter Hraber (University of New Mexico).	Yuying Tian (VPISU)
Brandon Higgs (GMU)	Sunita Kumari (GMU)
Thomas Heiman (GMU)	Sarah Bittenbender (GMU)
Hrishikesh Deshmukh (GMU)	Karen Schwartz (GMU)
Elo Leung (GMU)	Vasuki Palanigobu (GMU)
Kevin Thompson (GMU)	Farhana Alam (GMU)
James C. Diggans (GMU)	Rachel Brower (GMU)
Timothy Tickle (UNCC)	Shaun Rabah (GMU)
Cristina Baciu (UNCC)	Anthony Zukas (GMU)
Christopher Overall (UNCC)	Saeed Khoshnevis (GMU)
Saeed Koshnevis (UNCC)	Krishna Kanchinadam (GMU)
Sushant Patil (UNCC)	

Weller Current and Pending

14-0058 2014 NIH "Ultra-sensitive Nucleic Acid Detector for Measurement of Reduced Sample Sizes". NIH - SBIR business partner is DotMetrics. Scored top 90%, not funded.

14-0048 2014 CHS "Gene expression of 3 target genes and 5 control genes in a cohort of TBI patients and controls" Funded by Carolina's Health Systems, award amount and period under negotiation.

2013 – 2017 Burroughs Wellcome Education Fund award, $107,000. "The B3 Summer Science Camp at Olympic High School" PI Smith, co-PI Weller

14-0432 NSF-MRI: Acquisition of an Ion Proton DNA Sequencer for Research at UNC Charlotte" PI Janies, co-PI Weller. $159,000. Not funded, upon request for resubmission this was funded internally.

2012-2013 Faculty Research Grant with Dr. Sara Levens of Psychology – the UNCC Behavioral Genomics project, does not go through NORM. ($12,000)

2013 – present. Accelerated Technology Laboratories co-development grant, material donatin. ATL provided TITAN LIMS software application and developer time to the Weller lab. "Customized workflows for control ofBSL2, BSL3 and next-generation sequencing labs". Value is reported as $1,000,000 (depending on the amount of customization).