

Steven M. Menchen

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BACKGROUND SUMMARY

- 30 years of experience developing and commercializing products to support DNA sequencing and genetic analysis businesses
 - Chemical reagents
 - Surface modification
 - New materials
- PhD in organic synthesis
- Recruited and managed highly performing, multi-disciplinary technical teams
- 100 issued US patents (fluorescent dyes, capillary electrophoresis fluids, polymerase substrates, surface modification and functionalization, polymeric materials, conjugated particles)
- Extensive interactions with legal departments to develop and implement strategies for IP and litigation

PROFESSIONAL EXPERIENCE

2016-2017 Quantapore, Inc.
Menlo Park, CA

Director, chemistry

- Supplied surface modifying polymers and mobility modified dye-labeled DNA polymerase substrates to support nanopore DNA sequencing

2011-2016: Life Technologies/Thermo Fisher Scientific
South San Francisco, CA

Scientific Fellow, Medical and Life Sciences Division

- Developed 2nd generation DNA sequencing technology
 - Identified and implemented chemistry and materials for the development of reagents and consumables for the Ion Torrent DNA sequencer

2006-2011: Applied Biosystems/Life Technologies
Foster City, CA

Scientific Fellow, Genetic Analysis

- Developed 2nd generation DNA sequencing technology
 - Identified and implemented fluorescent dye, surface, and materials chemistries for the development of reagents and consumables for the SOLiD DNA sequencer

- 2005-2006: Applied Biosystems
Foster City, CA
Principle Scientist, Genetic Analysis
- Developed 2nd generation DNA sequencing technology
 - Functionalization/modification of refractory surfaces for single molecule sequencing program
- 2004-2005: Applied Biosystems
Foster City, CA
Principle Scientist, Advanced Research and Technology
- Establish technology for new business opportunities within life sciences
 - Developed program for intracellular bioassays
- 2002-2004: Applied Biosystems
Foster City, CA
Principle Scientist, Organic Chemistry, Core Science
- Managed group of 14 PhD organic- and bio-chemists as an organic synthesis service
 - Identified requirements and developed chemistry processes and reagents/consumables for programs supporting gene expression arrays (AB 1700), SNP genotyping (SNPlex), and real-time PCR
- 1999-2002: Applied Biosystems
Foster City, CA
Sr. Staff Scientist, Organic Chemistry
- Managed group of 8 organic- and biochemists to support DNA analysis programs
 - Identified requirements and developed chemistry processes and analytical methods for programs supporting gene expression arrays, DNA sequencing and genotyping, and real time PCR
- 1989-1999: Applied Biosystems
Foster City, CA
Staff Scientist, Organic Chemistry, Genetic Analysis Business Unit
- Recruited and managed group of 3-15 organic- and bio-chemists
 - Identified, developed, and commercialized new polymers, fluorescent dyes, and DNA polymerase substrates to enable DNA sequencing in the first successful capillary instrument (AB 310)
- 1985-1989: Applied Biosystems
Foster City, CA
Sr. Scientist, DNA Sequencing Group
- Developed and commercialized chemistry (new fluorescent dyes and enzyme substrates) for first commercially successful automated DNA sequencers (AB 370A, 373)
- 1981-1985: ARCO Chemical Co.
Newtown Square, PA
Sr. Chemist, Research and Development
- Developed new processes for monomer manufacturing, investigated new monomer materials to improve polymer properties, developed new routes for pharmaceutical intermediates

EDUCATION

- 1979-1981: Princeton University
Princeton, NJ
Postdoctoral Fellow, Chemistry Department (M. F. Semmelhack)
Use of tricarbonylchromium-arene complexes for the synthesis of natural products
- 1975-1979: University of Alberta
Edmonton, Alberta
PhD, Organic Chemistry (D. L. J. Clive)
 - Development and use of selenium and tellurium reagents for performing organic functional group transformations
- 1972-1975: San Jose St. University
San Jose, CA
M.S., Organic Chemistry (A. J. Castro)
 - Total synthesis of pyrroles
- 1968-1971 San Jose S. University
San Jose, CA
B.S., Chemistry
- 1966-1968 Santa Rosa Jr. Coll.
Santa Rosa, CA
A. A.

PUBLICATIONS

Electrophoresis Polymers

Quesada M A; Menchen S **Replaceable polymers for DNA sequencing by capillary electrophoresis.** METHODS IN MOLECULAR BIOLOGY (2001), 162 139-66

Preuschen, J.; Menchen, S.; Winnik, M. A.; Heuer, A.; Spiess, H. W. **Aggregation Behavior of a Symmetric, Fluorinated, Telechelic Polymer System Studied by ¹⁹F NMR Relaxation.** Macromolecules (1999), 32(8), 2690-2695

Ren H; Karger A E; Oaks F; Menchen S; Slater G W; Drouin G **Separating DNA sequencing fragments without a sieving matrix.** ELECTROPHORESIS (1999 Sep), 20(12), 2501-9

Lazaruk K; Walsh P S; Oaks F; Gilbert D; Rosenblum B B; Menchen S; Scheibler D; Wenz H M; Holt C; Wallin J **Genotyping of forensic short tandem repeat (STR) systems based on sizing precision in a capillary electrophoresis instrument.** ELECTROPHORESIS (1998 Jan), 19(1), 86-93

Wenz H; Robertson J M; Menchen S; Oaks F; Demorest D M; Scheibler D; Rosenblum B B; Wike C; Gilbert D A; Efcavitch J W **High-precision genotyping by denaturing capillary electrophoresis.** GENOME RESEARCH (1998 Jan), 8(1), 69-80

Xu, Bai; Li, Lin; Yekta, Ahmad; Masoumi, Zarah; Kanagalingam, Sabesh; Winnik, Mitchell A.; Zhang, Kewei; Macdonald, Peter M.; Menchen, Steve. **Synthesis, Characterization, and Rheological Behavior of Polyethylene Glycols End-Capped with Fluorocarbon Hydrophobes.** Langmuir (1997), 13(9), 2447-2456

Rosenblum B B; Oaks F; Menchen S; Johnson B **Improved single-strand DNA sizing accuracy in capillary electrophoresis.** NUCLEIC ACIDS RESEARCH (1997 Oct 1), 25(19), 3925-9

Menchen, Steve; Johnson, Ben; Winnik, Mitchell A.; Xu, Bai. **Flowable networks as DNA sequencing media in capillary columns.** Electrophoresis (1996), 17(9), 1451-1458

Menchen, Steve; Johnson, Ben; Winnik, Mitchell A.; Xu, Bai. **Flowable Networks as Equilibrium DNA Sequencing Media in Capillary Columns.** Chemistry of Materials (1996), 8(9), 2205-2208

Menchen, Steve; Johnson, Ben; Madabhushi, Ramki; Winnik, Mitchell. **The design of separation media for DNA sequencing in capillaries.** Proceedings of SPIE-The International Society for Optical Engineering (1996), 2680(Ultrasensitive Biochemical Diagnostics), 294-303

Grossman P D; Menchen S; Hershey D **Quantitative analysis of DNA-sequencing electrophoresis.** Genetic Analysis, Techniques and Applications (1992 Feb), 9(1), 9-16

DNA Sequencing

Khan, Shaheer; Rosenblum, Barnett; Taing, Meng; Menchen, Steve. **Dye terminator chemistry: Effects of substrate structure on sequencing chemistry.** Innovation and Perspectives in Solid Phase Synthesis & Combinatorial Libraries: Peptides, Proteins and Nucleic Acids--Small Molecule Organic Chemistry Diversity, Collected Papers, International Symposium, 6th, York, United Kingdom, Aug. 31-Sept. 4, 1999 (2001), Meeting Date 1999

Rosenblum, B. B.; Lee, L. G.; Spurgeon, S. L.; Khan, S. H.; Menchen, S. M.; Heiner, C. R.; Chen, S. M. **New dye-labeled terminators for improved DNA sequencing patterns.** Nucleic Acids Research (1997), 25(22), 4500-4504

Sanders J Z; Petterson A A; Hughes P J; Connell C R; Raff M; Menchen S; Hood L E; Teplow D B **Imaging as a tool for improving length and accuracy of sequence analysis in automated fluorescence-based DNA sequencing.** Electrophoresis (1991 Jan), 12(1), 3-11

Connell, C.; Fung, S.; Heiner, C.; Bridgham, J.; Chakerian, V.; Heron, E.; Jones, B.; Menchen, S.; Mordan, W.; et al. **Automated DNA sequence analysis.** BioTechniques (1987), 5(4), 342-4, 346-8

Fluorescent Dyes

Menchen, Steve; Benson, Scott; Upadhya, Krishna; Theisen, Pete; Hauser, Joan; Kenney, Paul. **Fluorescent labeling of DNA for genetic analysis.** Proceedings of SPIE-The International Society for Optical Engineering (2000), 3926(Advances in Nucleic Acid and Protein Analyses, Manipulation, and Sequencing), 88-94

Lee, L. G.; Spurgeon, S. L.; Heiner, C. R.; Benson, S. C.; Rosenblum, B. B.; Menchen, S. M.; Graham, R. J.; Constantinescu, A.; Upadhya, K. G.; Cassel, J. M. **New energy transfer dyes for DNA sequencing.** Nucleic Acids Research (1997), 25(14), 2816-2822

Flanagan J H Jr; Khan S H; Menchen S; Soper S A; Hammer R P **Functionalized tricyanocyanine dyes as near-infrared fluorescent probes for biomolecules.** Bioconjugate Chemistry (1997 Sep-Oct), 8(5), 751-6

Organic Functional Group Transformations

Clive, Derrick L. J.; Chittattu, Gim J.; Farina, Vittorio; Kiel, William A.; Menchen, Steven M.; Russell, Charles G.; Singh, Alok; Wong, Chi Kwong; Curtis, Neville J. **Organic tellurium and selenium chemistry. Reduction of tellurides, selenides, and selenoacetals with triphenyltin hydride.** J. Am. Chem. Soc. (1980), 102(13), 4438-47

Clive, Derrick L. J.; Menchen, Steven M. **Alkali Metal O,O-diethyl phosphorotelluroates, a reagent class for deoxygenation of epoxides, especially terminal epoxides.** J. Org. Chem. (1980), 45(12), 2347-54

Clive, D. L. J.; Farina, Vittorio; Singh, Alok; Wong, Chi Kwong; Kiel, William A.; Menchen, Steven M. **Cyclofunctionalization of olefinic urethanes using benzeneselenenyl chloride in the presence of silica gel: a general route to nitrogen heterocycles.** J. Org. Chem. (1980), 45(11), 2120-6

Clive, D. L. J.; Chittattu, G. J.; Farina, V.; Kiel, W. A.; Menchen, S. M.; Russell, C. G.; Singh, A.; Wong, C. K.; Curtis, N. J. **Selenium and tellurium reagents for organic synthesis.** Proc. Int. Symp. Org. Selenium Tellurium Compd., 3rd (1981), Meeting Date 1979, 43-68

Clive, Derrick L. J.; Menchen, Steven M. **Conversion of aldehydes and ketones into selenoacetals: use of tris(phenylseleno)borane and tris(methylseleno)borane.** J. Org. Chem. (1979), 44(24), 4279-85

Clive, Derrick L. J.; Menchen, Steven M. **New reagents for deoxygenation of sulfoxides: use of compounds with selenium-boron bonds.** J. Chem. Soc., Chem. Commun. (1979), (4), 168-9

Clive, Derrick L. J.; Menchen, Steven M. **New route to selenoacetals: exchange reaction between acetals and tris(phenylseleno)borane.** J. Org. Chem. (1979), 44(11), 1883-5

Clive, Derrick L. J.; Chittattu, Gim; Curtis, Neville J.; Menchen, Steven M. **1,3-Transposition of primary allylic alcohols: a new application of selenoxide chemistry.** J. Chem. Soc., Chem. Commun. (1978), (17), 770-1

Clive, Derrick L. J.; Wong, Chi Kwong; Kiel, William A.; Menchen, Steven M. **Cyclofunctionalization of olefinic urethanes with benzeneselenenyl reagents: a new general synthesis of nitrogen heterocycles.** J. Chem. Soc., Chem. Commun. (1978), (9), 379-80

Clive, Derrick L. J.; Menchen, Steven M. **New method of access to selenoacetal chemistry: use of tris(phenylseleno)borane.** J. Chem. Soc., Chem. Commun. (1978), (8), 356

Clive, Derrick L. J.; Menchen, Steven M. **New and selective method for deoxygenating epoxides: use of the organic tellurium reagent sodium OO-diethyl phosphorotelluroate.** J. Chem. Soc., Chem. Commun. (1977), (18), 658-9

Clive, Derrick L. J.; Kiel, William A.; Menchen, Steven M.; Wong, Chi-Kwong. **New method for deoxygenation of sulfoxides: use of OO-diethyl hydrogenphosphoroselenoate.** J. Chem. Soc., Chem. Commun. (1977), (18), 657-8

ISSUED U. S. PATENTS

Fluorescent Dyes

US 8,586,718 (November 19, 2013); **Multi-chromophoric quencher constructs for use in high sensitivity energy transfer probes**; Benson, Scott C.; Menchen, Steven M.; Upadhy, Krishna G.

US 6,716,994 (April 6, 2004); **Mobility-Modifying Cyanine Dyes**; Menchen, Steven M.; Benson, Scott C.; Rosenblum, Barnett B.; Khan, Shaheer H.

US 7,833,756 (November 16, 2010); US 6,919,445 (July 19, 2005); US 6,566,071 (May 20, 2003); **Methods of labelling polynucleotides with dibenzorhodamine dyes**; Benson, Scott C.; Lam, Joe Y. L.; Menchen, Steven Michael

US 7,018,431 (March 28, 2006); US 6,583,168 (June 24, 2003); **Sulfonated diarylrhodamine dyes**; Menchen, Steven M.; Benson, Scott C.; Lam, Joe Y. L.; Zhen, Weiguo; Sun, Daqing; Rosenblum, Barnett B.; Khan, Shaheer H.; Taing, Meng

US 6,326,153 (December 4, 2001); **Polynucleotides labeled with dibenzorhodamine dyes**; Benson, Scott C.; Lam, Joe Y. L.; Menchen, Steven Michael

US 6,221,606 (April 24, 2001); US 6,111,116 (August 29, 2000); US 5,936,087 (August 10, 1999); **Dibenzorhodamine dyes**; Benson, Scott C.; Lam, Joe Y. L.; Menchen, Steven Michael

US 6,051,719 (April 18, 2000); **Dibenzorhodamine dyes**; Benson, Scott Conrad; Lam, Joe Y. L.; Upadhy, Krishna Gajanan; Radel, Peggy Ann; Zhen, Weiguo; Menchen, Steven Michael

US 6,008,379 (December 28, 1999); **Aromatic-substituted xanthene dyes**; Benson, Scott Conrad; Menchen, Steven Michael; Theisen, Peter David; Upadhy, Krishna Gajanan; Hauser, Joan Dale

US 6,649,598 (November 18, 2003); US 6,403,812 (June 11, 2002); US 6,096,723 (August 1, 2000); US 5,885,778 (March 23, 1999); US 5,654,442 (August 5, 1997); US 5,188,934 (February 23, 1993); **4, 7-Dichlorofluorescein dyes as molecular probes**; Menchen, Steven M.; Lee, Linda G.; Connell, Charles R.; Hershey, N. Davis; Chakerian, Vergine; Woo, Sam L.; Fung, Steven

US 6,303,775 (October 16, 2001); **Polynucleotides labelled with asymmetric benzoxanthene dyes**; Benson, Scott C.; Menchen, Steven M.; Theisen, Peter D.; Hennessey, Kevin M.; Furniss, Vergine C.; Hauser, Joan

US 6,248,884 (June 19, 2001); **Extended rhodamine compounds useful as fluorescent labels**; Lam, Joe Y. L.; Benson, Scott C.; Menchen, Steven M.

US 6,781,001 (August 24, 2004); **Nucleic acids labelled with extended rhodamine dyes**; Lam, Joe Y. L.; Benson, Scott C.; Menchen, Steven M.

US 8,628,975 (January 14, 2014); US 7,776,568 (August 17, 2010); US 8,124,746 (February 28, 2012); **Methods and kits using extended rhodamine dyes**; Lam, Joe Y. L.; Benson, Scott C.; Menchen, Steven M.

US 6,221,604 (April 24, 2001); **Electron-deficient nitrogen heterocycle-substituted fluorescein dyes**; Upadhy, Krishna G.; Menchen, Steven M.; Zhen, Weiguo

US 7,179,906 (February 20, 2007); US 6,617,445 (September 9, 2003); US 6,020,481 (February 1, 2000); US 5,840,999 (November 24, 1998); **Asymmetric benzoxanthene dyes**; Benson, Scott C.; Menchen, Steven M.; Theisen, Peter D.; Hennessey, Kevin M.; Furniss, Vergine C.; Hauser, Joan

US 5,231,191 (July 27, 1993); **Rhodamine phosphoramidite compounds**; Woo, Sam L.; Menchen, Steven M.; Fung, Steven

US 4,965,349 (October 23, 1990); **Method of synthesizing oligonucleotides labeled with ammonia-labile groups on solid phase supports**; Woo, Sam L.; Menchen, Steven M.; Fung, Steven

US 9,090,775 (July 28, 2015); US 8,383,841 (February 26, 2013); US 7,491,830 (February 17, 2009); **Phenyl xanthene dyes**; Lam, Joe Y. L.; Menchen, Steven M.; Zou, Ruiming; Benson, Scott C.

Electrophoresis Media for DNA Sequencing

US 6,759,202 (July 6, 2004); US 6,756,204 (June 29, 2004); US 5,807,682 (September 15, 1998); US 5,777,096 (July 7, 1998); US 5,703,222 (December 30, 1997); US 5,470,705 (November 28, 1995); **Probe composition containing a binding domain and polymer chain and method of use**; Grossman, Paul David; Fung, Steven; Menchen, Steven Michael; Woo, Sam Lee; Winn-Deen, Emily Susan

US 5,989,871 (November 23, 1999); **Kits for DNA sequencing employing a mixed DNA-polymer chain probe**; Grossman, Paul D.; Fung, Steven; Menchen, Steven M.; Woo, Sam Lee; Winn-Deen, Emily S.

US 5,624,800 (April 29, 1997); US 5,580,732 (December 3, 1996); **Method of DNA sequencing employing a mixed DNA-polymer chain probe**; Grossman, Paul D.; Fung, Steven; Menchen, Steven M.; Woo, Sam L.; Winn-Deen, Emily S.

US 5,514,543 (May 7, 1996) **Method and probe composition for detecting multiple sequences in a single assay**; Grossman, Paul D.; Fung, Steven; Menchen, Steven M.; Woo, Sam L.; Winn-Deen, Emily S.

US 7,129,050 (Oct 31, 2006); US 7,115,376 (October 3, 2006); **Method for distinguishing different-sequence polynucleotides**; Grossman, Paul David; Fung, Steven; Menchen, Steven Michael; Woo, Sam Lee; Winn-Deen, Emily Susan

US 5,759,369 (June 2, 1998); US 5,468,365 (November 21, 1995); US 5,290,418 (March 1, 1994); **Viscous electrophoresis polymer medium and method**; Menchen, Steven Michael; Winnik, Mitchell A.; Johnson, Ben F.

US 7,863,357 (January 4, 2011); US 7,045,048 (May 16, 2006); US 6,358,385 (March 19, 2002); US 6,355,709 (March 12, 2002); US 5,916,426 (June 29, 1999); US 5,567,292 (October 22, 1996); US 5,552,028 (September 3, 1996); **Polymers for separation of biomolecules by capillary electrophoresis**; Madabhushi, Ramakrishna S.; Menchen, Steven M.; Efcavitch, J. William; Grossman, Paul D.

US 6,051,636 (April 18, 2000); US 5,891,313 (April 6, 1999); **Entrapment of nucleic acid sequencing template in sample mixtures by entangled polymer networks**; Johnson, Ben F.; Menchen, Steven M.; Bloch, Will

Polymerase Substrates for DNA Sequencing

US 6,504,024 (January 7, 2003); US 6,248,568 (June 19, 2001) **Propargylethoxyamino nucleotide primer extensions**; Khan, Shaheer H.; Menchen, Steven M.; Rosenblum, Barnett B.

US 7,687,236 (March 30, 2010); US 7,429,651 (September 30, 2008); US 6,811,979, (November 2, 2004); **Fluorescent nucleobase conjugates having anionic linkers**; Taing, Meng; Khan, Shaheer H.; Menchen, Steven M.; Rosenblum, Barnett B.

US 6,653,462 (November 25, 2003); US 6,197,555 (March 6, 2001); US 6,096,875 (August 1, 2000); US 5,948,648 (September 7, 1999); **Nucleotide compounds including a rigid linker**; Khan, Shaheer H.; Rosenblum, Barnett B.; Zhen, Weiguo; Menchen, Steven M.

US 7,019,128 (March 26, 2006); US 5,821,356 (October 13, 1998); **Propargylethoxyamino nucleotides**; Khan, Shaheer H.; Menchen, Steven M.; Rosenblum, Barnett B.

US 5,770,716 (June 23, 1998); **Substituted propargylethoxyamido nucleosides, oligonucleotides and methods for using same**; Khan, Shaheer H.; Menchen, Steven M.; Rosenblum, Barnett B.

US 5,366,860 (November 22, 1994); **Spectrally resolvable rhodamine dyes for nucleic acid sequence determination**; Bergot, B. John; Chakerian, Vergine; Connell, Charles R.; Eadie, J. Scott; Fung, Steven; Hershey, N. Davis; Lee, Linda G.; Menchen, Steven M.; Woo, Sam L.

US 8,058,414 (November 15, 2011); **Unnatural polymerase substrates that can sustain enzymatic synthesis of double stranded nucleic acids from a nucleic acid template and methods of use**; Menchen, Steven; Rosenblum, Barnett; Kenney, Paul; Khan, Shoeb; Ma, Zhaochun; Chen, Jer-Kang; Lam, Joe Y.; Huang, Boli

US 8,389,699 (March 5, 2013); **Nucleic acid terminators incorporating a cationic moiety and methods for their use**; Rosenblum, Barnett; Menchen, Steven

DNA Sequencing Systems

US 7,658,288 (February 9, 2010); **Bisulfite conversion reagent**; Liu, Yafei; Fiske, Haley O.; Menchen, Steven M.

US 7,364,855 (April 29, 2008); **Methods and kits for methylation detection**; Andersen, Mark R., Chen, Jer-Kang, Hunkapiller, Michael W.; Menchen, Steven M.

US 4,855,225 (August 8, 1989); **Method of detecting electrophoretically separated oligonucleotides**; Fung, Steven; Woo, Sam L.; Haugland, Richard P.; Menchen, Steven M.; Connell, Charles R.

US 7,709,808 (May 4, 2010); **Systems, methods and apparatus for single molecule sequencing**; Reel, Richard T.; Oldham, Mark F.; Nordman, Eric S.; Boege, Steven J.; Menchen, Steven M.

Surface Chemistry

US 7,368,296 (May 6, 2008); **Solid phases optimized for chemiluminescent detection**; Edwards, Brooks; Geiser, Timothy G.; Menchen, Steven M.; Sparks, Alison L.; Voyta, John C.

US 7,928,038 (April 19, 2011); **Intermediates and methods for forming passivated surfaces on oxide layers and articles produced thereby**; Menchen, Steven M.; Inman, Christina E.; Taing, Meng; Luong, Khai; Li, Handong

US 8,173,198 (May 8, 2012); **Deposition of metal oxides onto surfaces as an immobilization vehicle for carboxylated or phosphated particles or polymers**; Menchen, Steven M.; Inman, Christina E.; Taing, Meng; Fry, George A.

Fluorescent Particles

US 9,034,920 (May 19, 2015); US 8,618,161 (December 31, 2013); US 7,432,298 (October 7, 2008); **Fluorescent polymeric materials containing lipid soluble rhodamine dyes**; Lam, Joe Y. L.; Menchen, Steven M.; Zou, Ruiming; Benson, Scott C.

US 7,323,696 (January 29, 2008); **Phosphor particle coded beads**; Vann, Charles S.; Connell, Charles R.; Lau, Aldrich N. K.; Taing, Meng C.; Menchen, Steven M.

Hydrogel Particles for DNA sequencing

US 9,067,954 (June 30, 2015); US 9,062,079 (June 23, 2015); US 9,062,080 (June 23, 2015); **Hydrophobic diacrylamide compound**; Kjus, Nini H.; Fonnum, Geir; Branchaud, Bruce; Ying, Lai-Qiang; Menchen, Steven M.; Gremyachinskiy, Dmitriy; Kang, Hee Chol

US 9,139,665 (Sept. 22, 2015); US 9,139,666 (Sept. 22, 2015); US 9,156,925 (Oct. 13, 2015); US 9,487,603 (Nov. 8, 2016); US 9,243,085 (Jan. 26, 2016); **Hydrophilic polymeric particles and methods for making and using same**; Fonnum, Geir; Modahl, Grete I.; Kjus, Nini H.; Molteberg, Astrid E.; Tran, Diem; Aaserud, Jo; Gokmen, Talha M.; Menchen, Steven M.; Fuller, Carl; Andruzzi, Luisa; Hinz, Wolfgang

US 9,139,667 (Sept. 22, 2015); **Conjugated polymeric particle and method of making same**; Menchen, Steven; Blanchard, Alan; Andruzzi, Luisa; Khan, Shaheer; Gremyachinskiy, Dmitriy; Lui, Alfred; Stolarczyk, Craig; Sokolsky, Tanya; Thwar, Prasanna Krishnan

Miscellaneous (1)

US 4,575,527 (March 11, 1986); **Viscosity stabilized water-soluble amine polymers**; Dixon, Kenneth W.; Menchen, Steven M.

US 9,575,069 (Feb. 21, 2017); **Use of antibody-surrogate antigen systems for detection of analytes**; Menchen, Steven; Lam, Joe Y.; Ma, Zhaochun; Mullah; Khairuzzaman Bashar