

CARL T. YAMASHIRO, PH.D.

College of Health Solutions
Arizona State University
Health Futures Center
Phoenix, AZ 85054

(480) 884-0348
carl.yamashiro@asu.edu

PROFESSIONAL AND RESEARCH EXPERIENCE

Arizona State University (ASU)

Associate Clinical Professor, *College of Health Solutions* 2014 – present
Program Director, *Biomedical Diagnostics Master's Degree Program* 2017 – 2022

Developed and taught courses in Immunology/Immunoassays, Molecular Diagnostics, Research, and Applied Projects for the online Master's Degree Program in Biomedical Diagnostics (BMD). Secured partnerships with multiple diagnostics companies to support Applied Projects course and mentoring of students. Playing a major role curriculum development and strategic planning for BMD. Facilitates student recruitment by meeting with prospective students and assisting with development of promotional materials for the BMD program and currently serving as the Program Coordinator for the BMD MS degree program. Devised, developed and conducted activities for developing diagnostic product definitions by teams of participants for the Alliance for Cancer Early Detection (ACED) summer school sessions held at University of Cambridge, UK in July 2019 and Oregon Health Science University in July 2020 (virtual sessions). Received the 2020 Bioscience Educator of the Year Award from the Arizona Bioindustry Association (AZBio) and the Arizona Commerce Authority (ACA).

Associate Research Professor, *College of Nursing and Health Innovation* 2010 – 2013
Director, *Center for Healthcare Innovation & Clinical Trials, and Center for Health Information and Research, College of Health Solutions*

Managed the development and implementation of a network of community-oriented clinical researchers throughout Arizona to increase the volume of clinical studies/trials in the state. Co-created and managed CONECTR (Community Oriented Network for Enhanced Clinical Trials and Research) based within the Center for Healthcare Innovation & Clinical Trials at ASU's Health Solutions. The network was collaborative effort with Quintiles, the world's largest contract research organization which brought in dozens of clinical trials and >\$2M of additional revenue to the member sites. Additional duties included assisting researchers at ASU in the area of clinical research development, as well as to seek out external collaborations in the areas of drug and medical device development. Successfully set up a collaboration between Dr. Sandeep Gupta of ASU with Dr. Richard Heuser, an interventional cardiologist at St. Luke's Medical Center, Phoenix and was instrumental in securing funding from Arizona Technology Enterprise (AzTE) for a pilot study to be conducted at St. Luke's. Played critical roles assisting Dr. Michael White of ASU's Dept. of Criminology and Criminal Justice to obtain a National Institute of Justice grant to study the effects on cognitive functioning in individuals who had been exposed to Taser treatments. Subsequently directed the development of the study protocol which quickly obtained IRB approval. Co-recipient of the ASU President's Award for Innovation in 2010. Assisted students from ASU's Barrett Honors College to obtain internships at various research sites in Arizona.

Managed the Center of Health Information and Research (CHiR) with respect to refocusing the center towards conducting grant supported research involving "big data" and developed new associations with healthcare organizations to help support research and development efforts in response to the Affordable Care Act.

Program Director. *Biodesign Institute*

2009 – 2010

Principal Investigator for a \$40.8M contract with the Biomedical Advanced Research and Development Authority (BARDA – within the Department of Health and Human Services). Responsible for development of a high throughput system for radiation biodosimetry based on gene expression biomarkers. Managed seven subcontractors which included industrial automation, healthcare and academic organizations.

Program manager for the Physical Sciences Oncology Center led by Dr. Paul Davies within the Physics Department at ASU. Managed activities of physicists and cancer biologists to develop new avenues of cancer research with a strong focus on utilizing physical scientific approaches towards a more quantitative understanding of cancer.

Director, Research Management Office. *Biodesign Institute*

2009

Directed a multi-team department responsible for managing the overall life cycle of projects, with an emphasis on large and complex programs/projects. Department facilitated research efforts by providing professional program management, research administration, competitive/strategic intelligence and written content/editorial expertise for all ten research centers employing over 300 individuals engaged in research at the Biodesign Institute and other related departments within ASU. Ensured increased success rates for sponsored awards through a comprehensive and holistic approach to the project lifecycle.

Additional responsibilities included working with researchers on technology assessment and development, assistance in identifying and setting up collaborations with external entities, and participating in the evaluation and pursuit of commercialization opportunities. Worked in the areas of functional genomics, proteomics and metabolomics.

Assoc. Director, Technology Development. *Biodesign Institute*

2007 – 2008

Senior program manager within the Research Management Office of the Biodesign Institute. Managed several multi-million dollar programs that involved project planning, risk management, budget management, preparing reports and providing formal briefings on program status and future plans. Managed the preparation of successful grant applications to the NCI (cancer research using physical scientific approaches) and Singapore (development of protein biomarkers for myocardial infarction and cardiovascular disease). This included representing ASU and the Biodesign Institute as the Program Manager for the Partnership for Personalized Medicine with over \$62M in funding and involving the Translational Genomics Research Institute (TGen), Fred Hutchinson Cancer Research Center and the Luxembourg government as key partners with an initial focus on developing better applications for staging lung cancer.

Sr. Research Professional. *Biodesign Institute, Arizona State University*

2004 – 2006

Project managed assay development utilizing devices and systems implementing microfluidics and nanotechnologies for genomic analysis assay applications. Implementing product development and quality systems processes necessary for on-time delivery of high-quality products that the department is contracted to provide to customers/collaborators. Principal Investigator for Product Development Core of NIAID/NIH grant (Columbia University-Lead institution and total \$25M award of which \$5.9M was awarded to Biodesign/ASU) for development of minimally-invasive, high-throughput radiation biodosimetric systems. Responsible for product development management for the three projects conducted by teams at Columbia University (cytogenetics platform), Harvard University (metabolomics platform) and ASU (genomics platform). Co-PI on project to use amplified fragment length polymorphism (AFLP) to identify adulterant species of plant material in a dietary supplement. Co-investigator of a \$7M contract with a UK forensics company. Lead inventor of a novel gene expression classifier approach with patent application submitted and licensed to a diagnostics company.

PathogenDx

Vice President of Product Development

2012 – 2019

Scientific Advisor

2019-present

Built a product development team from four to twelve employees to conduct development, QA/QC, and microarray and assay chemistry manufacturing. Launched three products for pathogen detection in cannabis and agricultural products and one product for environmental monitoring of a variety of bacterial and fungal species. Member of executive team for strategic product pipeline planning.

Arizona Collaboratory

Co-Founder/Director

2014 – present

The Arizona Collaboratory is a 501(c)6 non-profit with the mission to provide financial, human and social capital required to accelerate the growth of businesses in Arizona, thus creating jobs and wealth via applied learning, networking and access. The Collaboratory has leveraged some leading technologies to create a crowdsourcing platform for financial capital and a network to bring together disparate groups in Arizona for increased and accelerated social capital.

Carl Yamashiro Consulting LLC

Principal

2013 – present

Consultation services offered include: Healthcare technology assessments and development, molecular diagnostics (nucleic acids and proteins) development, clinical research network development and management, grant writing, multidisciplinary R&D team building and management, project/program management, smart wearable device development and testing, and mentoring scientists wanting to go into management.

Current and past examples of consultation services provided include: Algorithm development for smart wearable devices, grant applications preparation, lead consultant for a startup company in the area of health and wellness management, product development for microarray-based detection of pathogens, and developing a new clinical research program for a network of neurologists in Arizona.

INanoBio, LLC

Director of Product Development, Consultant

2012 – present

Responsible for strategic mapping for product development in the areas of next generation DNA sequencing and nanosensors. Served as Project Manager for development and manufacturing of nanopores for next generation DNA sequencing project supported by NIH grant.

PrognosDx Health, Inc.

Clinical and Industrial Advisor

2013 – 2015

Chief Scientific Officer

2009 – 2013

Member of the executive management team responsible for assessing and developing technologies consistent with the mission of the company. Current core technology involved epigenetic alterations of histones which serve as biomarkers for prognostic and diagnostic indications primarily for cancer and treatment response.

Molecular Profiling Institute (acquired Nanobiomics)(now Caris Life Sciences)

Vice President, Research and Development

2006 – 2007

Built a new group to identify and conduct feasibility/development of candidate diagnostic/prognostic tests in the areas of cancer, cardiovascular and neurological disease to be offered within a CLIA-certified esoteric reference laboratory. Responsible for screening new technologies/tests, organizing

and leading the quarterly Scientific Advisory Board meetings and serving as primary liaison between MPI and the Translational Genomics Research Institute (TGen) for technology transfer.

Director, Product Development. *NanoBiomics* 2004–2005
Helped set up a new company focused on development of molecular diagnostic devices and systems that was a spin-off between ASU and TGen. Acquired by the Molecular Profiling Institute in June 2005.

Independent Consulting

Catapult BioAccel (now BioAccel) 2009 – 2010
Assessed technologies under consideration for funding by this bio-accelerator organization, including diabetes care and autoimmune disease management.

Molecular Profiling Institute (MPI) 2005 – 2006
Consulted on development of a lab-on-a-chip system for molecular diagnostic applications and on specific molecular diagnostic applications in the areas of oncology and infectious disease.

Translational Genomics Research Institute (TGen) 2005
Assisted in the development of grant proposals in the areas of neurology and infectious disease.

Thailand Ministry of Public Health (NIH) 2004
Trained personnel on use of DNA sequence analysis software. Consulted on developing capabilities for microarray design, testing and production for diagnostics and monitoring applications.

Neugenesis (acquired by Intrexon, 2011) 1994 – 1995
Advised on genetic manipulation of *Neurospora crassa* to enhance mammalian protein production.

Amersham Biosciences (acquired Motorola Life Sciences)(now part of GE Healthcare)

Director, Genetic Variation 2002–2004
Led assay development department responsible for developing SNP applications that include an updated version of CodeLink P450 Bioarray and the Genome Scanning Bioarray used as a SNP-based linkage mapping tool comparable to microsatellite-based methods. Member of Core Team comprised of topline executives developing a plan for entering the in vitro molecular diagnostics field. Also responsible for CodeLink platform development (includes assay automation, new surface chemistries, improvement of assay processes such as target amplification and hybridization time reduction). Assisted with ISO 13485 certification process in collaboration with Quality group.

Senior Scientific Manager, SNP Assay Development *Motorola Life Sciences* 1999–2002
Started a new group to develop standard platforms for sample preparation, target amplification and post-amplification processing. Subsequently managed CodeLink SNP assay development group comprised of 16 (5 Ph.D.) scientists, engineers and technicians. Group developed the first launched SNP microarray research product, CYP450 Genotyping Bioarray. Worked with The SNP Consortium (TSC) on developing a SNP-based human linkage map. Responsible for platform improvements for SNP and Expression assay platforms. Amersham Biosciences acquired Motorola CodeLink in July 2002.

Roche Molecular Systems (Roche acquired Boehringer Mannheim)

Principal Scientist, Human Genetics 1998–1999
Built and led a new group responsible for developing a microarray-based diagnostic system, in collaboration with Affymetrix, for resequencing the human p53 gene in tumor specimens for detection and identification of mutations. Developed a new technique for efficient nucleic acid extraction from formalin-fixed, paraffin-embedded tissue samples. Also led a group for systems development involved in integrating chemistries, disposables and new instrumentation design for microarray-based in vitro diagnostic applications.

Project Manager, DNA Probes *Boehringer Mannheim* 1996–1998
Built and led a new group responsible for the development of nucleic acid-based detection assays for infectious disease agents (cytomegalovirus (CMV) and human papillomavirus (HPV)). Charter member of the Global Program Management team for the LightCycler®, a real-time PCR system. Received Special Recognition award for efforts bringing together the new molecular diagnostics program. Roche acquired Boehringer Mannheim in June 1998.

Perkin Elmer/Applied Biosystems Division

Scientist, Food/Environmental 1994–1996
Development of rapid detection methods for microbial pathogens in food and environmental samples. Project leader for commercially released TaqMan™ *Salmonella* PCR Amplification/Detection Kit. Initiated concept, research and development for the PrepMan™ sample preparation kit and the *E. coli* O157:H7 TaqMan PCR Amplification/Detection kit for food samples. Received Special Recognition Award from the CEO for exemplary work performed during development of TaqMan assays and sample preparation kit. Initiated feasibility and development activities for detection assays for *Listeria monocytogenes*, *Giardia lamblia*, *Cryptosporidium parvum* and Shigatoxigenic *E. coli*. Dedicated 25% of time towards marketing tasks, including writing white papers and other technical publications.

Stanford University

Postdoctoral Fellow *Department of Biological Sciences* 1990–1994
Advisor: Charles Yanofsky
Research projects: Genetic and molecular studies on the regulation of asexual development in *Neurospora crassa*. Developed tools and methodologies for improved molecular genetic analyses of *N. crassa*. Molecular genetic studies on heterokaryon incompatibility in *N. crassa*. Research performed as an American Cancer Society Postdoctoral Fellow and a Stanford Program in Cancer Biology Fellow.

University of Oregon

Graduate student *Institute of Molecular Biology, University of Oregon* 1984–1990
Advisor: Tom Stevens
Thesis: A biochemical and genetic analysis of the yeast vacuolar proton-translocating adenosine triphosphatase.
Supported by an NIH Molecular Biology predoctoral training grant.

International Genetic Engineering, Inc. (now XOMA)

Research Associate 1982–1984
Cloned several genes from *Salmonella typhimurium* and expressed them in the yeast *Saccharomyces cerevisiae*. Developed and “manufactured” dideoxy DNA sequencing kit used by the company. Constructed yeast expression vectors and plant genomic libraries.

EDUCATION

Ph.D.	1990	Molecular Biology	University of Oregon, Eugene
B.S.	1981	Biochemistry	University of California, Los Angeles

AWARDS AND SERVICE

Advisor, Board of Science & Medicine, BioQuick News, 2020-present
Recipient, Michael A. Cusanovich Arizona Bioscience Educator of the Year, AZBio, 2020
Member, Admissions Committee for BMI/BMD programs, 2020
Member, Faculty Associates (FA) Oversight Committee, College of Health Solutions, 2019

Member, Faculty Mentor Committee, College of Health Solutions, ASU, 2018-present
 Member, Clinical Trials Network (CTN) work group, ASU, 2018-present
 Member, BMI/BMD Faculty Recruitment Committee, College of Health Solutions, 2018-present
 President, Board of Directors, Recreation and Athletics for Individuals with Disabilities (RAD; non-profit organization), Chandler, AZ, 2012-present
 Co-organizer and panel discussion moderator, Embracing Change Conference, Arizona State University, 2012–2014
 Co-chair, Healthy Work Environment Task Force, College of Nursing and Healthcare Innovation, Arizona State University, 2010-2012
 Member, Scientific Track Organizing Committee, Southwest Bio Expo 2010, Arizona Biotechnology conference held in Tucson, AZ, May 2010
 Co-recipient, ASU President’s Award for Innovation for 2010
 Member, Scientific Advisory Board, PrognosDx Health, 2008-2015
 Managing Teams for Innovation and Success, Stanford Graduate School of Business Executive Education, 2008 (completed program)
 Volunteer/Coach/Unified Partner, Special Olympics Arizona and City of Chandler’s Therapeutic Recreation Program, 2006-present
 Representative, The SNP Consortium Board of Directors for Motorola and Amersham, 2002
 Member, Organizing Committee for AACC’s San Diego Conference 2001-2003
 Member, American Association for Clinical Chemistry (AACC), 2001- present
 Special Recognition Award, Boehringer Mannheim, 1997
 Member, American Society for Microbiology, 1982-1985, 1994-1998
 Member, Expert Panel, Symposium on *Cryptosporidium*: Microbiology’s New Enemy, 110th AOAC International Meeting, Orlando, FL, 1996
 Special Recognition Award from the CEO, Applied Biosystems, 1996
 Member, Society for Industrial Microbiology, 1996
 Member, American Association for the Advancement of Science, 1994-1996
 Member, AOAC International, 1994-1996
 Member, International Association of Milk, Food and Environmental Sanitarians, 1994-1996
 American Cancer Society Postdoctoral Fellowship, Stanford University 1991-1994 (awarded in 1990 but was granted a one year deferral)
 Program in Cancer Biology Postdoctoral Fellowship, Stanford University, 1990-1991
 Ad hoc reviewer, J. Biol. Chem., Appl. Environ. Microbiol., Fungal Genet. Newsl., 1990-2004.
 NIH Pre-doctoral Trainee in Molecular Biology, 1985-1989

TEACHING AND MENTORING

Courses Developed and Taught

BMD 513 Principles of Diagnostic Technology: Immunoassays (formerly BMD 598 Principles of Diagnostic Technology 2: Immunology) – Fall 2014, Fall 2015, Fall 2016, Spring 2017, Fall 2017, Spring 2018, Fall 2018, Spring 2019, Fall 2019, Spring 2020, Fall 2020, Spring 2021, Fall 2021
 BMD 590 Reading and Conference – Fall 2016
 BMD 592 Research – Spring 2015, Fall 2015, Spring 2016, Spring 2017, Spring 2018, Spring 2019, Spring 2020, Spring 2021
 BMD 593 Applied Research – Summer 2015, Fall 2015, Spring 2016, Summer 2016, Spring 2017, Summer 2017, Summer 2018, Summer 2019, Summer 2020, Summer 2021
 BMD 598 Current Perspectives in Biomedical Diagnostics – Fall 2016
 BMD 598/514 Molecular Diagnostics – Summer 2015, Spring 2016, Summer 2016, Spring 2017, Spring 2018, Spring 2019, Spring 2020, Spring 2021

Mentoring

Placed two Barrett Honors College (ASU) students at local clinical research companies for internships.
2013

Mentored several undergraduate students from the Barrett Honors College, ASU, 2013-2014

Mentored two undergraduate students for their Biology honors thesis projects at Stanford University,
1994

PATENTS

Zenhausern, F., Orozco, C., Richards, M., **Yamashiro, C.**, Amundson, S.A., Lenigk, R., Bittner, M.L., and Balagurunathan, Y.. (2016). Systems and methods for biodosimetry with biochip using gene expression signatures. US Patent 9,255,348.

Chui, B., Elghanian, R.,...**Yamashiro, C.T.**, et al. (2006). P450 single nucleotide polymorphism biochip analysis. US Patent 6,986,992.

Zenhausern, F., Orozco, C., Richards, M., **Yamashiro, C.**, Amundson, S.A., Lenigk, R., Bittner, M.L., and Balagurunathan, Y. (2010). Systems and methods for biodosimetry with biochip using gene expression signatures. WO 20100144558-A1 and PCT/2010/0144558.

Yamashiro, C.T., Balagurunathan, Y., and Bittner, M. (2007). Ratio-based, gene-pair classifier approach for gene expression signature set identification. PCT/US08/587364. (Licensed from ASU by Caris Life Sciences, 2008)

Luehrsen, K.R., Gupta, V., Mazumder, A., Elghanian, R., **Yamashiro, C.**, and Yowanto, H. (2004). P450 single nucleotide polymorphism biochip analysis. AU2002314734, CA24401486AA, EP1373574A4, JP2004532026T2 and WO2002083839A3.

RESEARCH SUPPORT

Ongoing Support

2021 HTH 016 Yamashiro (Co-I), Aspinall (PI) 7/20-6/22

Rockefeller Foundation (\$1.5M)

ASU Covid-19 Diagnostics Commons

Overall goal: Support of efforts to develop test use cases, build an interactive back-to-work data dashboard, catalog and review testing innovations and keep an updated repository of tests that includes quality metrics, with the ultimate goal of scaling smart testing solutions to decrease the transmission of, and illness and death related to COVID-19.

Completed Support

2011-IJ-CX-0102 Yamashiro (Co-I), White (PI) 1/12-12/14

National Institute of Justice (\$408K)

Examining the Effects of the TASER on Cognitive Functioning

Overall goal: Determine if there is significant impairment of cognitive functioning after being tased.

1 R21 HG006314-01 Yamashiro (Co-I), Takulapalli (PI) 8/15/11-7/31/14

NIH/NHGRI (\$916K)

High Speed DNA Sequencing by Chemical Recognition Using Novel Nanopore Technology

Overall goal: Develop a novel next generation DNA sequencing technology which can very rapidly and accurately sequence single strands of DNA. (Supporting my efforts for INanoBio)

AzTE Fund Yamashiro (Project Manager), Gupta (PI) 5/12-11/12

Arizona Technology Enterprise (\$10K)

GeM-REM: Resource Efficient Long Term Monitoring Technique for Electrocardiogram Signals

Overall goal: Demonstrate ECG equivalency between wireless monitor and standard monitors in hospital intensive care unit, in collaboration with St. Luke's Medical Center, Phoenix, AZ. This pilot study provided data critical for the successful R01 grant award to Sandeep Gupta.

018557-001 Yamashiro (Co-PI) 1/07-6/12

Kauffman Foundation

The Kauffman Campuses Initiative: The University as an Entrepreneur

Overall goal: Develop academic and research programs which promote entrepreneurship in a university setting.

5 U19 AI067773-049001 Yamashiro (Product Development Core PI and co-PI of ASU Project), Brenner (Lead PI) 8/31/05-7/31/10

NIH/NIAID (\$25M) (Yamashiro completed 11/06 due to position change)

Center for High-Throughput Minimally Invasive Dosimetry.

Overall goal: Develop system(s) to perform high throughput dosimetric measurements of radiation exposure in humans using minimally invasive sample collection.

Core goal: Manage the product development activities for the three major projects within the Center.

Project goal: Develop a prototype device to perform high volume measurements of gene expression biomarkers indicative of radiation exposure.

4 U54 CA143862-03 Yamashiro (Co-I), Davies (PI) 9/30/09-8/31/11

NIH/NCI (\$3.4M) (Yamashiro completed on 6/10 due to a position change)

A Center for the Convergence of Physical Science and Cancer Biology

Overall goal: To further the depth and breadth of cancer research through a unique "think tank" approach involving the analysis of the physical nature of cancer cells.

HHSO100201000008C Yamashiro (Lead PI) 12/16/09-12/15/14

BAA-BARDA-09-36 (\$40.8M) (Yamashiro completed on 6/10 due to a position change)

Biomarker-Based Radiation Dosimetry

Overall goal: Develop a system product to perform high throughput dosimetric measurements of radiation exposure in humans based on genomic biomarkers.

Contract Yamashiro (Co-I), Zenhausern (PI) 5/1/06-9/15/09

Forensic Science Services (UK) (\$7M) (Yamashiro completed in 11/06 due to position change)

Overall goal: Develop an integrated genomics testing system for use in a mobile forensics vehicle utilizing microfluidics, capillary electrophoresis and SNP genotyping technologies.

PUBLICATIONS

1. Kuslich, C. D., Chui, B., and **Yamashiro, C. T.**, (2019). Overview of PCR. Current Protocols Essential Laboratory Techniques, 18, e27. doi:10.1002/cpet.27

2. Eggers, R., May, M., O'Brien, K., Patel, M., **Yamashiro, C.**, and Hogan, M. (2017). Simplified, highly multiplex pathogen analysis for agricultural, food, water, and environmental sampling. *Inform*, *28*, 22-27.
3. White, M.D., Ready, J.T., Kane, R.J., **Yamashiro, C.T.**, Goldsworthy, S., and McClain, D.B. (2015). Examining cognitive functioning following TASER exposure: A randomized controlled trial. *Appl. Cognit. Psychol.*, *29*, 600-607.
4. Kuslich, C.D., Chui, B., and **Yamashiro, C.T.** (2012). Overview of PCR. In "Current Protocols in Essential Laboratory Techniques, 2nd Edition", T. Downey (ed.), John Wiley & Sons, Unit 10.2.
5. Kuslich, C.D., Chui, B., and **Yamashiro, C.T.** (2008). Overview of PCR. In "Current Protocols in Essential Laboratory Techniques", T. Downey (ed.), John Wiley & Sons, Unit 10.2. (Book was winner of the PROSE Award for Excellence in Biology & Life Sciences).
6. Roberts, C.J., Raymond, C.K., **Yamashiro, C.T.**, and Stevens, T.H. (2004). Methods for studying the yeast vacuole in "Guide to Yeast Genetics and Molecular and Cell Biology, Part A", C. Guthrie and G.R. Fink (eds.), Elsevier Academic Press, 644-661.
7. Matisse, T.C., Sachidanandam, R., Kakol, J., Clark, A.G., Kruglyak, L., Wijsman, E., Buyske, S., Chui, B., Cohen, P., de Toma, C., Ehm, M., Glanowski, S., He, C., Heil, J., McMullen, I., Pericak-Vance, M.A., Silbergleit, A., Stein, L., Wagner, M., Wilson, A.F., Winick, J.D., Winn-Deen, E.S., **Yamashiro, C.T.**, Cann, H.M., Lai, E., and Holden, A.L. (2003). A 3.9 cM resolution human SNP linkage map and screening set. *Am. J. Hum. Genet.*, *73*, 271-284.
8. Wu, L., Patten, N., **Yamashiro, C.T.** and Chui, B. (2002). Extraction and amplification of DNA from formalin-fixed, paraffin-embedded tissues. *Appl. Immunohistochem. Mol. Morph.*, *10*, 269-274.
9. Paszko-Kolva, C. and **Yamashiro, C.** (2000). A fluorogenic PCR-based assay for the rapid detection of *Salmonella*. In "Nonradioactive Analysis of Biomolecules", C. Kessler (ed.), Springer-Verlag, pp. 622-630.
10. Oberst, R.D., Hays, M.P., Bohra, L.K., Phebus, R.K., **Yamashiro, C.T.**, Paszko-Kolva, C., Flood, S.J.A., Sargeant, J.M., and Gillespie, J.R. (1998). PCR-based DNA amplification and presumptive detection of *Escherichia coli* O157:H7 with an internal fluorogenic probe and the 5' nuclease (TaqMan) assay. *Appl. Environ. Microbiol.*, *64*, 3389-3396.
11. Cox, T., Frazier, C., Tuttle, J., Flood, S., Yagi, L., **Yamashiro, C.T.**, Behari, R., Paszko, C., and Cano, R.J. (1998). Rapid detection of *Listeria monocytogenes* in dairy samples utilizing a PCR-based fluorogenic 5'-nuclease assay. *J. Indus. Microbiol. Biotech.*, *21*, 167-174.
12. Lauter, F.-R., Marchfelder U., Russo, V.E.A., **Yamashiro, C.T.**, Yatzkan, E., and Yarden, O. (1998). Photoregulation of *cot-1*, a kinase-encoding gene involved in hyphal growth in *Neurospora crassa*. *Fungal Genet. Biol.*, *23*, 300-310.
13. Leslie, J.F. and **Yamashiro, C.T.** (1997). Effects of the *tol* mutation on allelic interactions at *het* loci in *Neurospora crassa*. *Genome*, *40*, 834-840.
14. Matsuura, M., **Yamashiro, C.T.**, Flood, S., and Paszko-Kolva, C. (1997). Detection of *Salmonella* in food using a fluorogenic 5' nuclease assay. *Am. Environ. Lab.*, March 1997, 24-25.
15. Kore-eda, S., **Yamashiro, C.T.**, and Murayama, T. (1997). A *ras* homologue of *Neurospora crassa* regulates morphology. *Mol. Gen. Genet.*, *254*, 427-432.
16. Chen, S., Yee, A., Griffiths, M., Larkin, C., **Yamashiro, C.T.**, Behari, R., Paszko-Kolva, C., and De Grandis, S. (1997). The evaluation of a fluorogenic polymerase chain reaction assay for the detection of *Salmonella* species in food commodities. *Int. J. Food Microbiol.*, *35*, 239-250.

17. **Yamashiro, C.T.**, Ebbole, D., Lee, B.-U., Brown, R.E., Bourland, C., Madi, L., and Yanofsky, C. (1996). Characterization of *rco-1* of *Neurospora crassa*: a pleiotropic gene affecting growth and development that encodes a homolog of Tup1 of yeast. *Mol. Cell. Biol.* *16*, 6218-6228.
18. Witham, P.K., **Yamashiro, C.T.**, Livak, K.J., and Batt, C.A. (1996). A PCR-based assay for the detection of *Escherichia coli* shiga-like toxin (SLT) genes in ground beef. *Appl. Env. Microbiol.*, *62*, 1347-1353.
19. Lauter, F.-R., **Yamashiro, C.T.**, and Yanofsky, C. (1996). Light stimulation of conidiation in *Neurospora crassa*: Studies with the wild-type strain and mutants *wc-1*, *wc-2*, and *acon-2*. *Photochem. Photobiol. B: Biol.*, *37*, 203-211.
20. Paszko-Kolva, C., **Yamashiro, C.T.**, and Jakubowski, W. (1996). Comparison of conventional protozoal detection methods with the polymerase chain reaction (PCR). *Proceedings 1995 Water Quality Technol. Conf.*, pp. 1663-1671.
21. Paszko-Kolva, C., Thio, C., **Yamashiro, C.T.**, and Danielson, R. (1995). Advantages of the polymerase chain reaction for the rapid detection of *Legionella* species during outbreak investigations. *Microbiol. Eur.* *3*, 16-21.
22. Centola, M., **Yamashiro, C.T.**, Martel, L.S., Royer, J.C., and Schmidhauser, T.J. (1994). A protocol guide for the *N. crassa* yeast artificial chromosome library. *Fungal Genet. Newsl.*, *41*, 23-33.
23. Murayama, T., **Yamashiro, C.T.**, and Kore-eda, S. (1993). Genes related to regulation of conidial formation in *Neurospora crassa*. *Symp. Mycol. Soc. Japan*, 34-37.
24. **Yamashiro, C.T.**, Yarden, O., and Yanofsky, C. (1992). A dominant selectable marker that is meiotically stable in *Neurospora crassa*: the *amdS* gene of *Aspergillus nidulans*. *Mol. Gen. Genet.*, *236*, 121-124.
25. Royer, J.C. and **Yamashiro, C.T.** (1992). Generation of transformable spheroplasts from mycelia, macroconidia, microconidia, and ascospores of *Neurospora crassa*. *Fungal Genet. Newsl.* *39*, 76-79.
26. **Yamashiro, C.T.**, Kane, P.M., Wolczyk, D.F., Preston, R.A., and Stevens, T.H. (1990). Role of vacuolar acidification in protein sorting and zymogen activation: a genetic analysis of the yeast vacuolar H⁺-ATPase. *Mol. Cell. Biol.* *10*, 3737-3749.
27. Kane, P.M., **Yamashiro, C.T.**, Wolczyk, D.F., Neff, N., Goebel, M., and Stevens, T.H. (1990). Protein splicing converts the yeast *TFPI* gene product to the 69-kD subunit of the vacuolar H⁺-adenosine triphosphatase. *Science* *250*, 651-657.
28. Roberts, C.J., Raymond, C.K., **Yamashiro, C.T.**, and Stevens, T.H. (1990). Methods for studying the yeast vacuole. *Methods Enzymol.* *194*, 644-661.
29. Kane, P.M., **Yamashiro, C.T.**, and Stevens, T.H. (1989). Biochemical characterization of the yeast vacuolar H⁺-ATPase. *J. Biol. Chem.* *264*, 19236-19244.
30. Rothman, J.H., **Yamashiro, C.T.**, Kane, P.M., Raymond, C.K., and Stevens, T.H. (1989). Acidification of the lysosome-like vacuole and the vacuolar H⁺-ATPase are deficient in two yeast mutants that fail to sort vacuolar proteins. *J. Cell. Biol.* *109*, 93-100.
31. Rothman, J.H., **Yamashiro, C.T.**, Kane, P.M., and Stevens, T.H. (1989). Protein targeting to the yeast vacuole. *Trends Biochem. Sci.* *14*, 347-350.
32. Kane, P.M., **Yamashiro, C.T.**, Rothman, J.H., and Stevens, T.H. (1989). Protein sorting in yeast: the role of the vacuolar proton-translocating ATPase. *J. Cell Sci. Suppl.* *11*, 161-178.

POSTER ABSTRACTS

1. Lenigk, R., Phayre, A., Nagy, M., Prasad, M., Cox, D., Smith, S., Nordquist, A., Thomas, B., Yang, J., Richards, M., Hurth, C., Wei, Q., Dudley, J., Kumar, S., **Yamashiro, C.T.**, and Zenhausern, F. (2006). Development of a fully automated processing cartridge for STR-typing of sexual assault samples. 17th International Symposium on Human Identification, Nashville, TN, October 2006.
2. Zenhausern, F., **Yamashiro, C.**, Lenigk, R., Phayre, A., Wei, Q., Liu, Y., Nagy, M., Prasad, M., Yang, J., Cox, D., Smith, S., Dudley, J., Filipski, A., and Kumar, S. (2005). Integrated approach to automation of STR analysis system. 16th International Symposium on Human Identification, Grapevine, TX, September 2005.
3. Phayre, A., Prasad, M., Smith, S., Cox, D., Wei, Q., Kelam, V., **Yamashiro, C.**, and Zenhausern, F. (2005). STR fragment separation and analysis by chip electrophoresis module development for an integrated STR typing system. 16th International Symposium on Human Identification, Grapevine, TX, September 2005.
4. Lenigk, R., Nagy, M., Cox, D., Smith, S., Kelam, V., Yang, J., Richards, M., **Yamashiro, C.**, and Zenhausern, F. (2005). Towards automated STR-typing: Differential extraction and PCR amplification with plastic microfluidic devices. 16th International Symposium on Human Identification, Grapevine, TX, September 2005.
5. Chui, B., Gwynne, P., Bonner, R., Gaskin, M., Ledesma, A., Peck, T., Peters, T., Silbergleit, A., Amjadi, M., Feldman, R., and **Yamashiro, C.T.** (2003). P450 Allele and Haplotype Frequency Study in Different Populations Using an Enhanced Version of the CodeLink SNP Assay. 6th International Meeting on Single Nucleotide Polymorphism and Complex Genome Analysis, Chantilly, VA, November 2003.
6. Bonner, R., Chui, B., Gaskin, M., Gwynne, P., Ledesma, A., Peck, T., Peters, T., Silbergleit, A., Amjadi, M., Feldman, R., and **Yamashiro, C.T.** (2003). P450 Allele and Haplotype Frequency Study in Different Populations Using an Enhanced Version of the CodeLink™ SNP Assay. AACC San Diego Conference, Baltimore, MD, October 2003. *Clin. Chem.* 49, 1965.
7. Bonner, R., Chui, B., Gaskin, M., Gwynne, P., Ledesma, A., Peck, T., Peters, T., Silbergleit, A., Amjadi, M., Feldman, R., and **Yamashiro, C.T.** (2003). P450 Allele and Haplotype Frequency Study in Different Populations Using the CodeLink™ SNP Assay. 13th International Conference on Cytochromes P450, Prague, Czech Republic, July 2003.
8. Gwynne, P., Winick, J.D., Silbergleit, A., Lee, W., Chui, B., Bonner, M.R., Gaskin, M., Gandhi, A., Hernandez, M., Perez, T., Zdunek, J., Ledesma, A., Lew, S., Shippy, R., Stafford, P., Goldsmith, J., McWeeny, K., and **Yamashiro, C.T.** (2002). CodeLink Methods Used for Generating Data for the TSC SNP Linkage Map. AACC San Diego Conference, San Diego.
9. Winick, J.D., Silbergleit, A., Lee, W., Chui, B., Bonner, M.R., Gwynne, P., Gaskin, M., Gandhi, A., Hernandez, M., Perez, T., Zdunek, J., Ledesma, A., Lew, S., Shippy, R., Stafford, P., Goldsmith, J., McWeeny, K., and **Yamashiro, C.T.** (2002). Allele Frequency Determination of a 10 cM clustered set of SNPs for the TSC Linkage Mapping Project. American Society of Human Genetics Annual Conference, Baltimore, MD.
10. Pestova, E., Fermin, D.R., Cheah, T.C., **Yamashiro, C.T.**, Bonner, M.R., Chui, B.A., McWeeny, K., Gandhi, A., Hernandez, M., Goldsmith, J, and Gu, Z.J. (2001). Population Studies Using Motorola CodeLink™ Human P450 SNP Bioarrays. AACC San Diego Conference, San Diego.
11. Pestova, E., Fermin, D.R., Cheah, T.C., Gu, Z.J., Bonner, M.R., Chui, B.A., McWeeny, K., Gandhi, A., Hernandez, M., Goldsmith, J, and **Yamashiro, C.T.** (2001). Population Studies Using Motorola

CodeLink™ Human P450 SNP Bioarrays. 4th International Meeting on Single Nucleotide Polymorphisms and Complex Genome Analysis, Stockholm, Sweden, October, 2001.

12. Winick, J.D., Zilbergleyt, A., Bonner, M.R., Chui, B., Gwynne, P., Gaskin, M., Luehrsen, K., Kiser, G., Peters, T., Peck, T., Raich, T., Jia, Y., McWeeny, K., Gandhi, A., Hernandez, M., Perez, T., Pestova, E., Fermin, D., Cheah, T., Gu, J., and **Yamashiro, C.T.** (2001). Development of a genotyping platform for human P450 single nucleotide polymorphisms: The CodeLink P450 Bioarray. *Am. Soc. Hum. Genet. Suppl.* 4, 67, 459.
13. Bonner, M.R., McWeeny, K., Gwynne, P., Gilbreath, A., Tuggle, J.T., Peters, T., Xia, J., Winick, J.D., Luehrsen, K., Chui, B., Gaskin, M., Zilbergleyt, A., Kroutchinina, N., **Yamashiro, C.T.**, Kaysser-Kranich, T., Allegri, L., Wang, D., Gallagher, S., and Raich, T.J. (2000). BioChip SNP analysis: development of a 3-D microarray system. *Am. J. Hum. Genet. Suppl.* 67, Abstr. 1454.
14. Kornegay, J.R., Silbergleit, A., Sadorra, M., Tang, M., Schiffman, M., and **Yamashiro, C.** (1999). Detection of high-risk human papillomavirus using a PCR-ELISA methodology. 17th International Papillomavirus Conference, Charleston, Abstract Dia 28.
15. Green, R.L., **Yamashiro, C.T.**, Ma, M., Bost, D.A., Hays, M.P., Flood, S.J.A., Oberst, R.D., and Paszko-Kolva, C. (1997). A rapid PCR-based detection method for *E. coli* O157:H7 using a fluorogenic 5' nuclease assay. 111th AOAC International Annual Meeting, New Orleans.
16. Goodsaid, F., Flood, S., **Yamashiro, C.T.**, van Keulan, H., Livak, K., and Paszko-Kolva, C. (1997). Development of genus specific and species specific fluorogenic PCR-based assays for *Giardia*. American Society for Microbiology Annual Meeting, Miami, Abstract Q-21.
17. **Yamashiro, C.T.**, Behari, R., Flood, S.J.A., Newman, M., Knight, M.T., and Paszko-Kolva, C. (1996). A novel PCR-based fluorogenic 5' nuclease assay system for the rapid detection of *Salmonella* in foods. 110th AOAC International Annual Meeting, Orlando.
18. **Yamashiro, C.T.**, Behari, R., Flood, S.J.A., Ma, M., and Paszko-Kolva, C. (1996). Rapid Detection of *Salmonella* in Food Using the PCR-Based TaqMan™ Sequence Detection System. Food Authenticity Conference, Norwich, UK.
19. **Yamashiro, C.T.**, Matsuura, M., Batt, C.A., Paszko-Kolva, C. (1996). A fluorogenic PCR-based detection system for SLT-I-producing *Escherichia coli*. Society for Industrial Microbiology Annual Meeting, Research Triangle Park.
20. **Yamashiro, C.T.**, Behari, R., Flood, S.J.A., Thio, C., Witham, P., Norton, D.M., Kawasaki, S., Kimura, B., Fujii, T., and Paszko-Kolva, C. (1996). Detection of *Salmonella* using a novel PCR-based fluorogenic 5' nuclease assay. International Association of Milk, Food and Environmental Sanitarians Conference, Seattle. Abstract 153.
21. Cox, T., Behari, R., Flood, S.J.A., **Yamashiro, C.T.**, Paszko-Kolva, C., and Cano, R.J. (1996). Evaluation of rapid DNA extraction methods for detection of *Listeria monocytogenes* in dairy products using the TaqMan™ Sequence Detection System. International Association of Milk, Food and Environmental Sanitarians Conference, Seattle. Abstract 43.
22. Chen, S., Yee, A., Griffiths, M., Larkin, C., **Yamashiro, C.T.**, Behari, R., Paszko-Kolva, C., and De Grandis, S. (1996). Development and application of TaqMan™ LS-50B PCR Detection System for specific detection of *Salmonella* species in poultry, red meat and milk. American Society for Microbiology Annual Meeting, New Orleans. Abstract P-16.
23. Paszko-Kolva, C., **Yamashiro, C.T.**, Behari, R., and Thio C. (1995). Application of homogeneous PCR for the rapid detection of *Listeria monocytogenes* in dairy products and meat samples. Symposium on Problems of Listeriosis (XIIth International), Perth, Australia.

24. **Yamashiro, C.T.**, Behari, R., Cox, T., Cano, R.J., Batt, C.A., and Paszko-Kolva, C. (1995). Rapid detection of *Listeria monocytogenes* and *Salmonella* in food using the TaqMan™ PCR-based assay system. AOAC International Meeting, Nashville. Abstract 17-B-007.
25. **Yamashiro, C.T.**, Bassler, H.A., Witham, P.K., Batt, C., and Paszko-Kolva, C. (1995). Novel PCR-based detection assays for *Listeria monocytogenes* and *Escherichia coli*. Institute of Food Technologists Conference, Anaheim. Abstract 81E-8.
26. **Yamashiro, C.T.**, Rodgers, M., Jakubowski, W., and Paszko-Kolva, C. (1995). Development and evaluation of species-specific PCR detection assays for *Giardia lamblia* and *Cryptosporidium parvum*. American Society for Microbiology Annual Meeting, Washington D.C. Abstract Q-209.
27. Bassler, H. A., Knorr, R., **Yamashiro, C.T.**, Paszko-Kolva, C., and Batt, C. (1995). A TaqMan™ PCR based assay for *Listeria monocytogenes*. American Society for Microbiology Annual Meeting, Washington D.C. Abstract P-58.
28. Ware, M., Rodgers, M., Scarpino, P., **Yamashiro, C.T.**, Paszko-Kolva, C., and Jakubowski, W. (1995). Development and evaluation of a PCR detection method for *Giardia* and *Cryptosporidium* in Water Samples. American Society for Microbiology Annual Meeting, Washington D.C. Abstract Q-207.
29. **Yamashiro, C.T.** and Yanofsky, C. (1994). Cloning and characterization of *rco-1* in *Neurospora crassa*. Fungal Metabolism Gordon Conference, Plymouth, NH.
30. Leslie, J.F. and **Yamashiro, C.T.** (1993). The *het-8* locus of *Neurospora crassa*. Fungal Genetics Conference, Asilomar. Fungal Genet. Newsl. 40A, 26.
31. Ebbole, D.J., White, B., **Yamashiro, C.**, Madi, L., Brown, R., Bourland, C., and Yanofsky, C. (1993). Selection for aberrant activation of *con* gene expression in *Neurospora crassa* yields trans-acting mutants that alter normal conidial development. Fungal Genet. Newsl. 40A, 6.
32. Yanofsky, C., Lauter, F., **Yamashiro, C.**, and Ebbole, D. (1993). Shedding light on conidiation in *Neurospora*. J. Cell. Biochem. 17C, 129.
33. **Yamashiro, C.T.** and Yanofsky, C. (1992). Characterization of *con-11*: a conidiation-specific gene in *Neurospora crassa*. Fungal Metabolism Gordon Conference, Holderness, NH.
34. **Yamashiro, C.T.**, Kane, P.M., Wolczyk, D F., Neff, N., and Stevens, T.H. (1990). Protein splicing of the *TFPI* gene product is required for the biosynthesis of the yeast 69 kD vacuolar H⁺-ATPase subunit. Joint Meeting of the Genetics Society of America and the Genetics Society of Canada, San Francisco. July 1990.
35. **Yamashiro, C.T.**, Kane, P.M., Rothman, J.H., Raymond, C.K., and Stevens, T.H. (1989). Role of vacuolar acidification in yeast vacuolar protein localization. J. Cell Biol. 107, 571a. Abstract #3230.
36. Kane, P.M., **Yamashiro, C.T.**, and Stevens, T.H. (1989). Biochemical characterization of the yeast vacuolar H⁺-ATPase. J. Cell Biol. 107, 571a. Abstract #3231.
37. **Yamashiro, C.T.**, Kane, P.M., Rothman, J.H., Raymond, C.K., and Stevens, T.H. (1988). Role of vacuolar acidification in yeast vacuolar protein localization. Fourth International Congress of Cell Biology, Montreal. Abstract #P9.5.14.
38. Kane, P.M., **Yamashiro, C.T.**, and Stevens, T.H. (1988). Biochemical characterization of the yeast vacuolar H⁺-ATPase. Fourth International Congress of Cell Biology, Montreal. Abstract #P9.5.13.
39. **Yamashiro, C.T.**, and Stevens, T.H. (1987). Identification of the yeast vacuolar H⁺-ATPase genes. ASCB Summer Research Conference on "Acidic Intracellular Compartments in Plant and Animal Cells," Airlie, VA. Abstract #ST43.

INVITED SPEAKER (selected presentations)

1. **Yamashiro, C.T.** “Molecular Diagnostics and Applied Projects”, Precision Medicine World Conference, Mountain View, CA, January, 2017.
2. **Yamashiro, C.T.** “Diagnostics Authority and Biomedical Diagnostics”, G2 Lab Institute, Washington DC, October, 2016.
3. **Yamashiro, C.T.** “Biomedical Diagnostics at ASU”, G2 Lab Revolution, Chandler, AZ, April 2016.
4. **Yamashiro, C.T.** “You Don't Have to Be a Doctor or Scientist to Improve Medicine”, BioBuzz (for children and families), Arizona Science Center, Phoenix, AZ, April 2013.
5. **Yamashiro, C.T.** “Enhancing Arizona’s Clinical Research Enterprise”, The International Entrepreneurs (TiE), Arizona Chapter meeting, Scottsdale, AZ, September, 2011.
6. **Yamashiro, C.T.** “The Center for Healthcare Innovation and Clinical Trials”, Southwest Center for HIV/AIDS, Phoenix, AZ, June 2011.
7. **Yamashiro, C.T.** “Leveraging Academic Partnerships to Grow the Clinical Research Industry” (Roundtable Leader), Partnerships in Clinical Trials conference, Phoenix, AZ, April 2011.
8. **Yamashiro, C.T.** “CONNECTR and the Center of Healthcare Innovation and Clinical Trials”, Arizona Association of Community Healthcare Centers Workshop, Phoenix, AZ, March 2011.
9. **Yamashiro, C.T.** “Peptide Microarrays”, AZBio Inside Look: Applied Microarrays, Tempe, AZ, July 2008
10. **Yamashiro, C.T.** “Miniaturization and Integration for Molecular Diagnostics”, 1) Molecular Biotechnology Institute – Ministry of Public Health, 2) NECTEC – Thailand Science Park, and 3) Mahidol University (three separate talks), Bangkok, Thailand, December 2004.
11. **Yamashiro, C.T.**, Chui, B., Bonner, M.R., Gaskin, M., Gwynne, P., Winick, J., Silbergleit, A., and Ledesma, A. “Population Studies Using an Enhanced Version of the CodeLink P450 SNP Bioarrays Yield New and Novel Genotype and Haplotype Frequency Data”, ALA LabAutomation 2004 Conference, San Jose, CA, February 2004.
12. **Yamashiro, C.T.**, Bonner, M.R., Chui, B., Gaskin, M., Gwynne, P., Ledesma, A., Peck, T., Peters, T., Silbergleit, A., Amjadi, M., and Feldman, R. “Genotyping and Haplotype Analysis Using the CodeLink™ Human P450 Bioarrays”, Mutation Analysis Workshop, Palm Cove, Australia, July 2003.
13. **Yamashiro, C.T.** “Multiplex Genotyping using the CodeLink™ SNP Bioarray System”, University of Pittsburgh Medical Center, April 2003.
14. **Yamashiro, C.T.**, Chui, B.A., Bonner, M.R., Luehrsen, K.R., Silbergleit, A., and Winick, J.D. “Versatile High-Throughput SNP Genotyping Using Motorola CodeLink™ SNP Bioarrays”, smallTalk 2002 Conference, San Diego, CA, July 2002.
15. **Yamashiro, C.T.** “Applications of the Motorola CodeLink™ Human P450 SNP Bioarray”, Karolinska University, Stockholm, Sweden. October 2001.
16. Pestova, E., Fermin, D.R., Cheah, T.C., **Yamashiro, C.T.**, Bonner, M.R., Chui, B.A., McWeeny, K., Gandhi, A., Hernandez, M., Goldsmith, J, and Gu, Z.J. “Population Studies Using Motorola CodeLink™ Human P450 SNP Bioarrays”, Northwest Microarray Conference, Seattle, WA, August 2001.
17. **Yamashiro, C.T.** “SNPs and Chips in Practice”, AACC San Diego Conference on SNPs and Chips in Molecular Diagnostics, Anaheim, CA, November 2000.

18. **Yamashiro, C.T.** "Microarrays and molecular diagnostics", Veterinary Medical School, Kansas State University, Manhattan, KS, April 1999.
19. **Yamashiro, C.T.** "Development of a novel PCR-based assay for *Cryptosporidium parvum*", Symposium on *Cryptosporidium*: Microbiology's New Enemy, 110th AOAC International Meeting, Orlando, FL, September 1996.
20. **Yamashiro, C.T.** "TaqMan™ Detection System for *Salmonella*, a novel PCR-based system for rapid and sensitive detection", Food Authenticity, Norwich, UK. September 1996.
21. **Yamashiro, C.T.**, Matsuura, M., Batt, C.A., and Paszko-Kolva, C. "A fluorogenic PCR-based detection system for pathogenic *Escherichia coli*", Northern California Section of the Society for Industrial Microbiology Meeting, San Francisco. May 1996.
22. **Yamashiro, C.T.** "A PCR-based system for *Salmonella* testing in foods", Institute of Food Technologists Workshop and Meeting, Fresno, CA, March 1996.
23. **Yamashiro, C.T.** "TaqMan™, a novel PCR-based system for rapid and sensitive detection of foodborne pathogens", Special Tutorial Session, American Society for Microbiology Annual Meeting, Washington D.C., May 1995.
24. **Yamashiro, C.T.** "Implementation of TaqMan: a novel PCR-based system for rapid detection of foodborne pathogens", Rapid Methods for Microbial Analysis Workshop, Guelph, Canada, March 1995.
25. **Yamashiro, C.T.** "Cloning and characterization of *rco-1* in *Neurospora crassa*", Fungal Genetics Conference, Asilomar, CA, March 1995.
26. **Yamashiro, C.T.** "Working with the *Neurospora* YAC library", Fungal Genetics Conference, Asilomar, CA, March 1995.

Cited in the Phoenix Business Journal three times: 12/21/09, 1/17/10, 11/30/12
[http://www.bizjournals.com/phoenix/search?q=%22Carl+Yamashiro%22&title=+title%3D+title%3D+title%3D+title%3D+title%3D%20title=\)](http://www.bizjournals.com/phoenix/search?q=%22Carl+Yamashiro%22&title=+title%3D+title%3D+title%3D+title%3D+title%3D%20title=)