

Curriculum Vitae for Yniv Palti

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Current Position: Research Geneticist (since Sep. 2001); Lead Scientist of the Genomics Unit (since April 2008)

University Education and Additional Training

- 2000 - 2001 Research Associate, Cardeza Foundation for Hematologic Research, Thomas Jefferson University, Philadelphia, PA, USA. Supervisor: Dr. John L. Wagner.
Research project: shotgun sequencing of BACs that contain the dog MHC region.
- 1999 – 2000 Visiting Lecturer and Head of the DNA Analysis and Sequencing Unit, Dept. of Food Engineering and Biotechnology, Technion – Israel Institute of Technology, Haifa, Israel. Supervisor: Dr. Yechezkel Kashi.
Research subject: Application of DNA SNPs and simple sequence repeats (SSRs) as markers for rapid and sensitive identification of pathogenic *E. coli* strains.
- 1998 – 1999 Postdoctoral fellow, Animal Science Institute, Agricultural Research Organization, Beit-Dagan, Israel. Supervisors: Prof. Gideon Hulata and Dr. Micha Ron.
Research subject: Identification of DNA markers linked to sex-ratio distortions in tilapia (*Oreochromis aureus*).
- 1994 - 1997 Ph.D., Genetics & Cell Biology, Washington State University, Pullman, WA, USA. Supervisor: Prof. Gary Thorgaard. Title of thesis: Identification of candidate DNA markers associated with IHN virus resistance in backcrosses of rainbow x cutthroat trout.
- 1992 - 1994 M.S., Genetics & Cell Biology, Washington State University, Pullman, WA, USA. Supervisor: Prof. Gary Thorgaard. Title of thesis: Improvement of gynogenesis and aspects of egg quality in rainbow trout, M.S. research.
- 1988 - 1991 B.Sc., Economics, Faculty of Agriculture of the Hebrew University of Jerusalem, Rehovot, Israel.

Research grants

- 2007 Co-PI. BARD. Genetic basis of cyprinid herpes virus-3 resistance in common carp. (\$320,000)
- 2006 PD. CSREES-NRI-Animal Genome:Tool and Reagent Development. Production of an Integrated Physical and Genetic Map for Rainbow Trout. (\$696,416)
- 2005 Sub-contractor. USDA-CSREES-SBIR (Phase II). Project number WNK-2005-03237: Genetics of growth and reproduction in rainbow trout (*Oncorhynchus mykiss*) fed a plant-based diet. (\$255,695)
- 2003 Sub-contractor. USDA-CSREES-SBIR (Phase I). Project number WNK-2003-00519: Genetic basis of growth improvement in rainbow trout (*Oncorhynchus mykiss*) using plant-based diets. (\$65,000)

- 2002 Sub-contractor. USDA-CSREES-NRI: Animal Genome Reagent and Tool Development. Project number MDR-2002-03472: Genomic resources for examining disease resistance in rainbow trout. (\$622,000)
- 2000 NIH training grant at the Cardeza Foundation for Hematologic Research, Thomas Jefferson University, Philadelphia, PA.
- 1998 BARD postdoctoral fellowship. Title: Identification of candidate DNA markers linked to sex determination in tilapia (*Oreochromis aureus*). Postdoctoral fellow for two years.

Professional Societies

- American Fisheries Society (2003 - present)
- World Aquaculture Society (2006 – present)
- Associate Member Trout Farmers Association (2008 – present)
- National Research Support Project 8 of the USDA-CSREES National Animal Genome Research Program: (a) Chair Elect 2007 and Chair 2008 of the 2-day Aquaculture Genome Workshop at the International Plant & Animal Genome Conference; and (b) Salmonid Species Coordinator for the Aquaculture Genome Group (2007 – present).

Adjunct Faculty positions

- Division of Forestry, Davis college of Agriculture, Forestry and Consumer Science, West Virginia University (2002 – present).
- Dept. of Fisheries and Wildlife Sciences, Virginia Polytechnic Institute and State University (2005- present).

Editorial board

Marine Biotechnology (2005 – present)

Professional Advisory and Consulting Activities

- Member of the Scientific Advisory Committee of the British Columbia Salmon Farming Industry Brood-Stock Program (2008 – 2011).
- The planning committee of the 2006 Vancouver, BC meeting of the Consortium for Genome Research in All Salmonids Program (CGRASP), May 10-11, 2006, Leetown, WV.
- Member, Advisory Panel for Genetic Improvement for Troutlodge, Inc., a rainbow trout egg producer. Sumner, WA, September 2004.

List of Publications (2004-2009)

- Palti Y.** (2009). Genomics Technologies in Aquaculture. In K. Overturf (editor) Molecular Research in Aquaculture. Blackwell Publishing, Ames, IA, USA. (Book chapter)
- Kongchum, P, Rexroad III, CE, Hallerman, EM, David, L, Palti, Y,* (2009). SNP identification, genetic mapping and tissue expression of the rainbow trout *TLR9* gene. Animal Genetics. Accepted for publication.
- Silverstein, JT, Vallejo, RL, **Palti, Y,** Leeds, TD, Rexroad III, CE, Welch, TJ, Wiens, GD, Ducrocq, V, (2009). Rainbow trout resistance to bacterial cold-water disease is moderately heritable and is not adversely correlated with growth. Journal of Animal Science 87:860-867.

- Rexroad III, CE, **Palti, Y**, Gahr, SA, Vallejo, RL, (2008). A second generation genetic map for rainbow trout (*Oncorhynchus mykiss*). BMC Genetics 9:74.
- Pierce LR, **Palti Y**, Silverstein JT, Barrows FT, Hallerman EM, Parsons JE (2008). DNA Marker-Based Parentage Assignment Supports Practical Experiments at Commercial Aquaculture Operations: A Case Study Assessing Experimental Diets for Rainbow Trout (*Oncorhynchus mykiss*). Proceedings of the 7th International Conference on Recirculating Aquaculture, July 25-27, 2008, Roanoke, VA, USA.
- Pierce, LR, **Palti Y**, Silverstein, JT, Barrows, FT, Hallerman, EM, Parsons, JE, (2008). Family growth response to fishmeal and plant-based diets shows genotype x diet interaction in rainbow trout (*Oncorhynchus mykiss*). Aquaculture 278:37-42.
- Johnson, NA, Vallejo, RL, Silverstein, JT, Welch, TJ, Wiens, GD, Hallerman, EM, **Palti, Y**, (2008). Suggestive association of major histocompatibility IB genetic markers with resistance to bacterial cold water disease in rainbow trout (*Oncorhynchus mykiss*). Marine Biotechnology 10:429-437.
- Johnson, NA, Vallejo, RL, Rexroad III, CE, Hallerman, EM, **Palti, Y**, (2007). Development and evaluation of a new microsatellite multiplex system for parental allocation and management of rainbow trout broodstocks. Aquaculture 266:53-62.
- Palti Y**, Rodriguez FR, Gahr SA, Hansen JD (2007). Evolutionary history of the ABCB2 genomic region in teleosts. Developmental and Comparative Immunology 31(5):483-498.
- Palti Y**, Rodriguez FR, Vallejo RL, Rexroad III CE (2006). Mapping of toll-like receptor (TLR) genes in rainbow trout. Animal Genetics 37(6):597-598.
- Coulibaly I, Danzmann R, **Palti Y**, Vallejo RL, Gahr SA, Jianbo Y, Rexroad III CE (2006) Mapping of uncoupling protein 2 genes in rainbow trout. Animal Genetics 37(6):598-599.
- Coulibaly I, Gahr SA, **Palti Y**, Yao J, Rexroad III CE (2006). Genomic structure and expression of uncoupling protein 2 genes in rainbow trout (*Oncorhynchus mykiss*). BMC Genomics 7:203.
- Rodriguez, MF, Gahr, SA, Rexroad III, CE, **Palti, Y** (2006). A PCR screening method for rapid detection of microsatellites in bacterial artificial chromosomes (BACs). Marine Biotechnology 8(4):346-350.
- Palti, Y**, Silverstein, JT, Wieman, H, Phillips, JG, Barrows, FT, Parsons, JE. (2006). Evaluation of family growth response to fish meal and gluten-based diets in rainbow trout (*Oncorhynchus mykiss*). Aquaculture 255(1-4):548-556.
- Landis ED, **Palti Y**, Dekoning J, Drew R, Phillips RB, Hansen JD (2006). Identification and regulation of rainbow trout tapasin and tapasin-related genes. Immunogenetics 58(1):56-69.
- Rexroad III, C.E., **Palti, Y.**, Vallejo, R.L., Silverstein, J. (2006). Integration of molecular genetic information into the NCCCWA selective breeding program for rainbow trout. G. Hulata (Ed.) Proceedings of the BARD Aquaculture Workshop, Feb. 20-23, 2006, Eilat, Israel. Israeli Journal of Aquaculture 58(4):323-327.
- Danin-Poleg, Y, Somer, L, Cohen, LA, Diamant, E, **Palti, Y**, Kashi, Y (2006). Towards the definition of pathogenic microbe. International Journal of Food Microbiology 112, 236-243.
- Somer L, Danin-Poleg Y, Diamant E, Gur-Arie R, **Palti Y**, Kashi Y (2005). Amplified intergenic locus polymorphism as a basis for bacterial typing of *listeria* spp. and *escherichia coli*. Applied and Environmental Microbiology 71(6):3144–3152.

- Rodriguez, MF, Wiens, G, Purcell, M.K, **Palti, Y.** (2005). Characterization of Toll-like receptor 3 gene in rainbow trout (*Oncorhynchus mykiss*). Immunogenetics 57(7):510-519.
- Rexroad III CE, Rodriguez MF, Coulibaly I, Danzmann RG, DeKoning J, Phillips RB, **Palti, Y.** (2005). Comparative mapping of expressed sequence tags containing microsatellites in rainbow trout (*Oncorhynchus mykiss*). BMC Genomics 6:54.
- Wagner JL, **Palti Y,** DiDario D, Faraco J. (2005). Sequence of the canine major histocompatibility complex region containing non-classical class I genes. Tissue Antigens 65(6):549.
- Gahr, S.A., **Palti Y.,** Danzmann R.G. and. Rexroad, C.E III. (2004). Genomic Characterization of a novel pair of Id genes in the rainbow trout (*Oncorhynchus mykiss*). Animal Genetics 35(4):317-320.
- Diamant E, **Palti Y,** Gur-Arie R, Cohen H, Hallerman, EM, Kashi Y, (2004). Phylogeny and strain typing of *Escherichia coli* inferred from variation in Mononucleotide Repeat (MNR) Loci. Applied and Environmental Microbiology 70(4):2464-73.
- Palti Y,** Gahr SA, Hansen JD, Rexroad CE III (2004). Characterization of a New BAC Library for Rainbow Trout: Evidence for Multilocus Duplication. Animal Genetics 35(2):130-3.