

PCR will rapidly replace most equipment used in the clinical laboratory today. While tests are being developed in very friendly formats by applied science institutes and analytic machinery manufacturers, at this moment the people running those PCR machines are not laboratory techies but master's, doctoral and postdoctoral candidate-researchers who are obliged to get their results published in the form of developed, predictive tests from the new genetic information coming in from the Human Genome Organization (HUGO) Project. And that is where the rub is: the former medical resident while still pooh-poohing basic sciences, does not even qualify for academic posts in medical school departments anymore. Only PhD, DSc, MD-DSc or MD-PhD graduates with publications will get those posts in the basic sciences and not just physicians with clinical specialties, as it used to be.

The above has a connection with our work--you may now have more students from the basic sciences than the clinical sciences in the postgraduate division of your medical or health sciences school--if not very soon! Even dentistry can no longer hold out; DNA analysis has arrived at dentistry schools in the USA and it is logical to assume shortly other countries will follow. And so the schools of nutrition will have their biochemistry labs, psychology and cognitive sciences their murine-model labs.

Very soon, you can be sure, we will have to compare our specialized medical English (SME) list with new results to determine if the syllabi used in our lecture halls are still valid or to modify them to reflect this new reality of PCR diagnosis, if merited.

One wonders if PCR is really the common tool of the workbench of the scientist working in biomedicine and if it is a limiting or a selection factor in getting a good job at the postdoc level. A hint to the answer may be in a classified ad that appeared in **Science** (1998):**280**:5370:1797:

COURSES & TRAINING
IN SITU PCR TRAINING
An Offer From One Of The Pioneers
Of The Technique

The in situ polymerase chain reaction/hybridization IS-PCR method is a tool with tremendous power and potential to aid research investigation through its ability to select a single copy of a specific gene. In one comprehensive workshop, directed by **Professor Omar Bagasra**, M.D., Ph.D., learn to perform this technique on cell smears and tissue sections. Participants in this workshop will learn primer and probe design (including the special design methods specific for IS-PCR and RT-PCR) and optimization utilizing solution PCR, oligo design computer programs and Internet tools, and PCR analysis tools. This part of the workshop will include training in the use of World Wide Web molecular biology resources including GENBANK, BLAST searching, homology search tools, and various other research resources on the Internet. Participants will learn to detect DNA utilizing the IS-PCR method, as well as detecting RNA utilizing the reverse transcriptase initiated IS-PCR method (RT-I-IS-PCR). You will learn nonradioactive methods of in situ hybridization, and immunohisto- chemistry in combination with IS-PCR/hybridization. If interested please contact at:

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