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To whom it may concern

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Call for bids: panel next generation sequencing (PNGS) reagents

For our gene identification project funded by INTERREG A27, we intend to use commercial kits for the construction of genomic DNA libraries and exon sequence enrichment from these DNA libraries. For this specific bid, we need to construct and sequence custom-built libraries to analyze a minimum of 1000 patient samples in parallel for 521 specific genes involved in human dental and skeletal development. Methods may involve the following: a chip-based tiling exon oligonucleotide microarray is synthesized and used to create a pool of biotinylated nucleic acids or baits. The capture reagent baits may be RNA or DNA and may vary in length from 60 to 120 nt. Baits may be incubated with adapter-ligated DNA libraries in solution over 24-72 hours, allowing the hybridization of bait to target sequences. We are equipped to capture bait-target hybrids by streptavidin magnetic microbeads. A secondary LM-PCR is intended to generate sufficient DNA for sequencing.

Enriched libraries will be validated by Agilent BioAnalyzer for size distribution. Samples are intended for sequencing on semiconductor-based NGS platforms (IonTorrent (PGM), IonProton; both from LifeTechnologies). All reagents considered for this bid will have to be compatible with these instruments. Chip-based PNGS-library construction kits will also have to be compatible with next generation sequencing chemistry from LifeTechnologies.

This bid is open for 14 days from the day of publishing, ending on May 27, 2015.

PD Dr. E. Lausch