**Thank you for your interest to present your work at xMAP® Connect 2017!**

* Prepare a presentation title, the title included on the submission should be suitable for published material.
* Abstract text is limited to 3000 characters (approx 500 words).
* We ask to use 4 core elements: 1) background and aim, 2) methods, 3) results, 4) conclusions. We kindly ask you to use the format below.
* Please ensure the submission has been approved by all authors.
* By submitting an abstract, you agree to be present the 8th and 9th of November at the congress, should your abstract be selected.
* Please indicate if you would like to be a speaker or present a poster.

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| **Title:** High-throughput, multiplexed bead based serology in infections and cancer research |
| 1) Background and aim:  Detecting antibodies against infectious agents has a long-standing history in etiological research associating pathogens with cancer development. Historically, most seroepidemiological approaches have focused on single viruses or bacteria though, and many studies were underpowered because classical immunoassays such as ELISA require large sample volumes.  2) Methods:  We have developed multiplex serology, a high-throughput bead based assay that allows analyzing up to 2000 plasma or serum samples per day for antibodies to up 100 antigens simultaneously, based on sample volumes of less than 5 µl. Antigens are bacterially expressed Glutathione S-Transferase fusion proteins that are *in situ* affinity purified on Glutathione-derivatized fluorescence-encoded polystyrene microparticles.  3) Results:  Multiplex serology has been developed and validated for all infectious agents known to cause cancer (such as Human Papillomaviruses (HPV), *Helicobacter pylori*, Hepatitis B and C viruses), and many others suspected to be involved in cancer development (e.g., *Chlamydia trachomatis*, Human Herpesvirus 6). In less than 15 years, the method has been employed in more than 200 published studies, and has given rise to the discovery of biomarkers that are currently on their way into clinical practice, such as antibodies to the E6 oncoprotein of HPV type 16 and the pgp3 protein of *C. trachomatis* which are predictive for the development of oropharyngeal cancer (OPC) and ovarian cancer, respectively.  4) Conclusion:  Multiplex serology represents a quantum leap in seroepidemiological studies of infectious agents associated with cancer, and other chronic outcomes, such as neurodegenerative and autoimmune diseases. |