The Wellcome Trust Centre for Human Genetics (WTCHG) is a research institute of the University of Oxford, funded by the University, the Wellcome Trust and numerous other sponsors.

Its scientific objective is to explore all aspects of the genetic susceptibility of disease, including the understanding of how DNA variants contribute to the risk of disease in the population. Research activities include bioinformatics, cardiovascular disease, genomics, immunity and inflammation, metabolism, neurogenetics, statistical genetics and transgenics.

Since 1999 the WTCHG has been based in the Henry Wellcome Building of Genomic Medicine, which is located on the University of Oxford’s Old Road Campus. The WTCHG houses more than 400 occupants spread over three floors.

The original fire alarm and detection system installation, which was more than 10 years old, was in need of replacement. This was driven not only by the age of the system, but by the dwindling availability of spares, very significant costs involved with all maintenance and attendance issues, all of which was brought about by the need for full reliance upon a particular manufacturer because the system was closed protocol.

The University of Oxford Safety Office insists upon open protocol systems, together with commonality of equipment. The reason for this requirement is to be able to have a central maintenance contract with a competent contractor for the whole of the University estate, negating any problems with accessing software or equipment availability. The use of Hochiki devices and Kentec control panels for all replacement and new systems has been the norm for the past twenty years.

Oxfordshire based Pyrotec Services was asked to look at the existing system with a view to total replacement, which included renewing all existing devices and control panels, the retention wherever possible of all existing wiring, the provision of loop powered sounders, the enhancement of detection coverage, and improvement of access for maintenance purposes in certain areas, particularly within ceiling voids and lift shafts.

Following detailed proposals and costs the installation of a new analogue addressable fire alarm and detection system was agreed and funded by the University Safety Office. It was agreed that the new system be based around the Enhanced Systems Protocol (ESP). Paul Adams, Hochiki’s marketing manager, comments, “ESP is a robust total communications solution for intelligent fire detection and fully integrated systems. It has a multi-purpose structure that provides the flexibility and

www.hochikieurope.com
expansion to accommodate simple addressable systems through to integrated building management and safety systems. It is a robust system and perfectly suited for organisations such as WTCHG, where maximum reliability and minimum disruption from unwanted alarms are essential.

The project involved installing a 12 loop, 96 zone, analogue control panel and associated devices utilising the existing cabling infrastructure. Approximately 1,000 devices were installed including nearly 500 intelligent multi-heat sensors, which incorporate a variable temperature heat element and a rate of rise heat element – both of which are controlled from the control panel, allowing either one or both elements to be active in making the fire decision.

Asked why multi-sensors were the preferred option, Pyrotec’s Paul Slater comments: “Due to the diversity of work being carried out at WTCHG, it was important to have the option of being able to switch between detection modes on a daily basis. This provides versatility without compromising on safety.

“Access for visual inspection and the maintenance of smoke and heat detectors is essential. The University of Oxford Safety Office specifies that if point detection cannot be installed within a lift shaft in a manner that allows safe access (without the need to stand or ride on the lift car roof) a single zone air-sampling detector is to be installed outside the shaft with a short run of pipe work into the shaft. Consequently this requirement resulted in the installation of an Hochiki FIRElink aspirating system”.

As a result of careful planning the installation went very smoothly and was completed with minimal disruption to the activities within the building. Fire detection cover was maintained 24/7 during the installation by carefully interfacing between the new and old systems as the work progressed.

<table>
<thead>
<tr>
<th>Market Sector</th>
<th>Healthcare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>City/Town</td>
<td>Oxford</td>
</tr>
<tr>
<td>Product Range Used</td>
<td>ESP Intelligent Range</td>
</tr>
</tbody>
</table>

For guidance on how our products help this sector, visit [www.hochikieurope.com/healthcare](http://www.hochikieurope.com/healthcare)