# 2015 University Operations Outstanding Staff Team Awards

#### Lamp server compromise response team

This team actively and proactively pooled its skills, talents and knowledge in response to the 2015 compromise of the LAMP server hosting environment; they collaborated to discover the cause of the compromise, and later to build a secure hosting environment for the clients of the LAMP environment to migrate their essential web sites to.

As a result of their efforts, guidelines for users and administrators of the LAMP environment have been developed that, if followed, will minimize the chance of websites hosted in the LAMP environment being compromised. As well, these guidelines will result in the removal of personally identifiable information (PII) from the LAMP environment. In addition to guidelines, the team also worked to create a temporary secure hosting environment for those web sites that needed to handle PII as part of a division's operating procedures. This was all achieved with minimal disruption to clients, who were updated regularly.

The end result of their efforts has been to reduce the exposure in the LAMP environment, but also to provide a more secure temporary environment so that divisions using the LAMP environment for handling confidential data were not exposed to an indefinite service outage.

David Auclair Allan Stojanovic Peter Cheung Joe Bate

Donny Wong Elana Zatzman Jeremy Graham Gord Russell Alex Nishri Ted Sikorski Joseph Lam Michael Simms

### Learning Technologies Interoperability team

Over the past year and a half, in the context of the Academic Toolbox Renewal, the University has been moving towards a new model for the deployment of educational technologies and a key part of the project is the adoption and application of key international standards around learning technologies interoperability.

This team turned theory into practice allowing us to deploy new enterprise-level teaching and learning resources like WebWork, a community source math homework tool, and iClicker using international standards to integrate with our Learning Portal (Blackboard), but more importantly it has established the foundation for compatible future growth.

As part of the team's efforts, we have been able to assist several faculty/researcher innovation projects like Crowdmark, Jim Colliander's collaborative assessment environment and Steve Joordan's peer assessment tool Peer Scholar, helping our inventors create better inventions with potential for wider adoption. The team's practical work in support of the Academic Toolbox renewal is helping U of T garner international interest in our approach.

The team brought together a manager, a business analyst for academic processes, a software developer, and information risk analysts drawn from two different ITS units (ACT and ISEA) and accomplished an outcome that would have been unachievable through individual or siloed efforts, bringing backroom technical experts like programming and security into direct contact with our academic user community.

This team's success in aligning its diverse expertise in pursuit of university-wide standard practice will have impact on our students and faculty for many years.

# Learning Technologies Interoperability team

Marco Di Vittorio Ahalya Rajkumar Ryan Green Sue McGlashan Ashley Langille

# Virtual Machine Automation Tools team

This nomination recognizes the work of a highly skilled and diverse group of professionals who came together in a project to develop an efficient automated solution for provisioning and maintaining cost-efficient virtual server infrastructure. The team members rarely come in contact with the University's user community, but they have developed automated services that respond quickly to user needs and have reduced the need to expand human resources to keep up with increasing demand.

The EIS Enterprise Servers, Storage & Virtualization team was established to design, develop, implement and operate the University's centralized private Infrastructure-as-a-Service. Since its inception in early 2010, the Virtual Server Services (VSS) environment has expanded rapidly with an average annual growth of over 90 percent. The virtualized infrastructure helps the various University communities run critical academic and administrative services in an agile and reliable environment.

Cloud and virtualization technologies make it easier to scale and grow, but they also pose challenges. The team realized that it needed an automated provisioning tool in order to achieve more agile, efficient and reliable services while maintaining high productivity. After conducting extensive research, the VSS team found the opportunity to develop its own tools inhouse. Initiated in Dec 2014, the team has successfully executed each project step - from the requirements gathering, process integration, coding, and testing to the deployment of a beta version in March 2015. The VSS VM automation tool successfully executes most routine tasks within 15 minutes, responding to client needs at a standard offered by industry competitors like Google and Amazon. Since it became generally available in April, 2015, the VSS VM Automation tool has been playing an integral role to make the University's central cloud computing services even more efficient, agile and reliable by greatly minimizing manual intervention and errors while increasing team productivity and quality of the services.

The team deserves recognition for their quiet, but highly impact, leadership in achieving efficiency and capacity building in the University's adoption of cost-saving measures. Without the team's success in this project, at least one FTE in additional staff would have been hired to manage services now available through automation.

# Virtual Machine Automation Tools team

Evgueni Martynov Vladimir Vinogradov Jose Manuel Lopez Lujan Jae Chung Paul Kern Asbestos Tracker Team

Irfan Miraj and Doug Colby have been integral in implementing the "Asbestos Tracker".

Most of the buildings constructed on the St. George Campus prior to the 1980s contain asbestos in products such as fireproofing, pipe insulation and reinforcement in floor tiles and drywall compound. Government regulations require buildings to be inspected, asbestoscontaining materials identified and reports to be provided to building occupants and operators which can be kept on site for reference should maintenance or renovation work present a risk that the material will be disturbed.

To better facilitate management of data on asbestos-free areas and sample test reports and to improve the safe work processes of U of T and contractor employees, the "Asbestos Tracker" software package was developed in-house by Facilities and Services.

In short, accurate information is available to employees in real time. This critical information is provided to the people who plan, implement, perform and administer work in asbestos-containing buildings ensuring they are aware of potential hazards of their work environment. Project planning is easier and more focussed with the availability of this tool and this has led to cost efficiencies and savings, both in terms of the project planning and because the expertise and information is in house, and does not require the hiring of expensive external consultants.

It is estimated that cost savings from avoiding duplication of sample tests and using in-house staff over external consultants have totaled \$2.6 million since the Tracker's inception.

Irfan Miraj and Doug Colby

# TM1 Implementation Team

Over the last year, the TM1 Implementation Team worked together to design and implement a new software platform for the University's revenue budget allocation process. The existing Microsoft Excel model required a significant amount of manual data processing, with limited ability for collaboration and no automated reporting for academic divisions.

The team brought together individuals with expertise in project management, software development, budget processes, and institutional data. They delivered a new tool that simplifies the process of attributing operating revenue to academic divisions, automates the creation of divisional budget data packages, and allows for more sophisticated and dynamic budget reporting.

The new platform reduces staff time required for manual data processing and reduces the risk of error. Team members contributed a significant amount of time to the design and development of the new platform in addition to their regular duties. The team was fully committed to improving the efficiency of the annual budget allocation process, providing better information for divisional decision making, and developing a strong foundation upon which future budget tools can be built.

> Al Lecointe Jenny Cheng Jeff Waldman Susan Rodgers Archana Shah Andy Chien