

Junior Researcher Mentoring Programme

2023

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| Code: | JRMP2023_43 |
| School / Department: | Department of Applied Biology and Chemical Technology |
| Name of Research Team Member(s): | Dr Chua Song-Lin, Assistant Professor |
| Research Topic: | Assessing Microbial Contamination in Food Products and Associated Packaging |
| Short Description of the Research Project: | <p>Pathogens and spoilage microbes can attach to and colonise food on surfaces and their associated packaging/ processing tools, thus influencing the shelf-life and safety of food. This is especially true for raw foods, such as fruits and salads, which are consumed without cooking with heat. With the increasing popularity of raw foods such as sushi and salads among the younger generations in Hong Kong, it is crucial to monitor and assess the microbial contamination in such foods and their associated packaging/ processing tools. Furthermore, food processing tools and packaging, such as knives, utensils and plastic boxes, in kitchens, food industries and for personal use, may play a role in the transfer and dissemination of microbes across foods.</p> <p>Foodborne pathogens may form biofilms which are multicellular aggregates of microorganisms embedded in their self-produced exopolymeric matrix (EPS) attached to any surface, with implications for food contamination and infections.</p> <p>Here, we aim to evaluate microbial contamination in raw foods and associated packaging, and understand how</p> |

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| | microbes can disseminate across foods and packaging. Achieving these outcomes will provide insights into microbial contamination across foods and associated packaging, enabling future development of antimicrobial materials to reduce food contamination. |
| No. of Places Offered: | 2 |
| Frequency of Meetings: | Monthly |
| Special Requirement(s): | Preferred subject taken: Biology |

** The information presented above is subject to change.*