

# U of S SoTL Cluster Charter

## Developing Visual Literacy in Veterinary Pathology

### Description/Background (include purpose and need):

Visual literacy and observational skills are vital for veterinarians, including veterinary pathologists. In human medicine, teaching visual literacy to medical students through the use of fine arts interventions has been investigated, but there is no literature on this in veterinary medicine or in pathology (human or animal). This proposed cluster would focus on investigating the impact of fine arts interventions on the observational skills of veterinary students, specifically in the area of veterinary clinical pathology. In addition, this cluster would be the first in veterinary education at WCVM and would be an important step in increasing faculty awareness of research in veterinary medical education and exposing new faculty members to research in this area.

**Cluster Lead:** Nicole Fernandez, Associate Professor, Dept of Vet Pathology

### Members of the Cluster:

Ryan Dickinson, Assistant Professor, Dept of Vet Pathology

Melissa Meachem, Assistant Professor, Dept of Vet Pathology

Hilary Burgess, Clinical Associate, Dept of Vet Pathology

### Goals and predicted timeline (specific Deliverables/Milestones):

- **Fall 2017-** collaborate on the planning of 2 projects to be implemented in winter 2018. Other collaborators include faculty at the University of Calgary in Veterinary Medicine and Art History.
- **Winter 2018-** 2<sup>nd</sup> year class project- comparing the effects of an art intervention vs traditional cytology teaching on visual literacy. Alternative-treatment design, pre and post-tests (multiple post-tests).
- **Winter 2018-** 3<sup>rd</sup> year class project- comparing the effect of a cytology elective (in 3<sup>rd</sup> year) vs no cytology elective, and also the effect of an art intervention vs no art intervention on performance in rotations the following year. Retrospective and prospective alternative-treatment design with post-tests only.
- **Spring 2018-** 2<sup>nd</sup> year class project- data analysis and submission of abstract to UK Veterinary Education Symposium (summer 2018).
- **Summer 2018-** one or two cluster members present the 2<sup>nd</sup> year class research project at the UK Vet Ed Symposium.
- **Summer 2018-** 3<sup>rd</sup> year class project- collect retrospective data on the performance of the class of 2018.
- **Fall 2018-** prepare and submit manuscript for 2<sup>nd</sup> year class research project. Also plan potential new visual literacy projects for the upcoming year. Participate in research seminar series at WCVM to raise awareness of educational research.
- **Winter 2019-** implement new projects (may be an expansion of previous project)

- **Spring 2019**- 3<sup>rd</sup> year class project- collect final data and commence data analysis. Potential to submit abstract to educational conference.
- **Summer 2019**- prepare and submit manuscript for 3<sup>rd</sup> year class project.

**Envisioned process (specify how the group will function; e.g., frequency and types of meetings, how you will monitor milestones,):**

1. Cluster will meet a minimum of once per semester (3x/year). More meetings are likely in the fall semester when planning of research projects is underway.
2. Semester meetings will be to discuss ongoing research projects, but also how to raise the awareness of educational research at WCVM. One possibility is implementing monthly Education Rounds, which would be coordinated by cluster members.
3. Milestones will be monitored by the cluster lead.

**Financial (specify how funding will be spent, can be high level criteria and processes for allocating funds rather than a specific budget; note any additional or matching funds):**

The cluster will support the studies outlined above and other collaborative studies between cluster members that may arise from these initial projects in the area of visual literacy. The supports required for each study may be different, but are likely to include:

- publication charges
- poster printing
- educational meeting registration and travel fees
- statistical analysis
- educational resources (eg textbooks or workshop fees for cluster members)
- research assistant (eg for data entry)
- travel for colleagues to deliver art intervention

Funding decisions will be decided collectively as needs arise, via email or in person.

Decisions will be based on priority and potential availability of other funds to cover the cost. Additional funds are available through the start up grants of the cluster lead. At the discretion of the cluster members, funds may also be allocated to hosting Education Rounds or Veterinary Medical Education seminars at WCVM (for example, hosting an external speaker, purchase of refreshments, etc).

**Scope (Focus):**

In Scope: This cluster will support collaborative research between cluster members in the area of visual literacy in veterinary pathology. Other educational research projects in veterinary pathology may be supported as they develop.

Not In Scope: Other projects in veterinary pathology not in the area of visual literacy or veterinary education.

**Constraints, Assumptions, Risks and Dependencies of Note**

**Constraints**

Time- faculty members do have time allotted for scholarly activity, however cluster members have research interests in pathology as well as in veterinary education.

Resources- there is not a huge financial cost to educational research, however some funds are required (will be offset by cluster funding)

	Novelty- most members of the cluster do not have any experience in formal educational research, but are enthusiastic about the possibilities. Cluster members may benefit from some training in this area.
<b>Assumptions</b>	We have been told that educational research is valued by the university and the college. We are hoping that this work receives the same recognition that research in pathology does. We are hoping that our students will be active participants in the projects and as excited by the possibilities as we are. We also assume there is support from other faculty members interested in educational research.
<b>Risks and Dependencies</b>	<p>The most significant risk is that the project will not be completed and published due to a lack of time or lack of student and faculty participation. However, this risk is minimized by the support provided by the GMTLC, the commitment of the cluster lead to developing expertise in this area, and the enthusiasm of the cluster members.</p> <p>We are dependent on our colleagues at the U of C to help develop the fine arts interventions. We also need to secure ethics approval or exemption. We lack expertise in data analysis and will need to secure help in this area.</p>

**What in-kind support would benefit your project?**

- research design consultation
- data analysis assistance
- workshop for faculty members new to educational research
- support for Education Rounds at WCVM- ideas of how to proceed, raise awareness, etc