Guidance for developing ICON dissertations that align with the Core Research Principles and Criteria

As explained in the ICON handbook, ICON students are expected to conduct research and develop dissertations that adhere to the program's Core Research Principles and Criteria (Appendix F). However, to date there has been limited guidance about what, concretely, students need to do to satisfactorily meet these criteria. This may result in unnecessary frustration and anxiety for students, and also makes it hard to assess whether the ICON program as a whole is meeting its objectives. To address this, the ICON program committee has proposed a series of formal "checkpoints" to help guide students in meeting the objectives for multiple lenses and methodologies, for communication, and for reflexivity. These will be evaluated by the student's ICON representative, and if issues are identified the representative will work with the student to make necessary adjustments. None of this is intended to increase the total workload on the student, but rather to provide greater structure, support and clarity in meeting the existing requirements. Our goal is for everyone to meet all of these checkpoints successfully.

Multiple Lenses and Methodologies

In alignment with the ICON Core Research Principles and Criteria, the ICON dissertation research is expected to incorporate different lenses and methodologies and comprise an integrative approach to the research. **Lenses** are considered different when they are premised on different notions of the nature of reality (ontology); what constitutes a valid way of creating knowledge (epistemology); and what is valued (axiology). **Methodologies** are the research processes that are used to create knowledge from the perspective of a given lens. An **integrative research approach** includes a vision for how the knowledge gained through different lenses and methodologies will be considered in relation to one another to afford deeper insights.

Checkpoint 1: Use of multiple lenses and methodologies in the dissertation prospectus

Expectations for students: As part of the dissertation prospectus (or research proposal that is reviewed by the student's committee), students should meet with their ICON representative to discuss how their proposed dissertation research incorporates multiple lenses and methodologies and, as a whole, comprises an integrative approach to the research. This is an opportunity for the student (a) to self-evaluate and articulate how multiple lenses and methodologies have been incorporated into the proposed research and (b) to consider how knowledge created from different lenses will be related to one another (i.e., how the body of knowledge created in the dissertation will be *integrative*).

Evaluation: The ICON representative will evaluate the proposed use of multiple lenses and methodologies as part of the prospectus defense/research plan approval. If the ICON rep determines that the prospectus needs improvement to meet expectations of multiple lenses, methodologies, and their integration, they will work with the student and advisor to make the necessary revisions.

Checkpoint 2: Use of multiple lenses and methodologies in the final dissertation

Expectations for students: As part of the final Conclusions chapter of their dissertation, students are expected to reflect on their use of multiple lenses and methodologies in their work, and explain how

their integrative approach yielded insights beyond what would be gleaned by using a single lens. This is particularly important when the "integrativeness" of the dissertation involves different approaches used *among* chapters rather than *within* chapters. The student is encouraged to seek feedback from their ICON rep and advisor on a draft of the concluding chapter prior to the dissertation defense. Note that the Conclusions chapter also is where the students document their reflexivity (see below), so this chapter effectively does double duty.

Evaluation: As part of the dissertation defense, the ICON rep will evaluate the use of multiple lenses and methodologies in the dissertation. The ICON rep will consider both the concluding chapter and the dissertation as a whole.

Communication

The ICON core research principles and criteria state that students will be responsible for developing a plan for communication related to their research topic, and for documenting the plan's implementation through the completion of the dissertation research. For evaluation purposes, we focus on the plan, rather than the documentation of the plan's implementation. We expect the student to make a goodfaith effort to implement the plan and to communicate with their committee about the implementation, but there will be no formal assessment of implementation success.

Checkpoint: Communication plan

Expectations for students: Students will develop a plan for a communication product or process¹related to their research topic, which engages with one or more non-academic audiences. Audiences may be highly specific (e.g., community partners of the research, an influential organization) or broad (e.g., the general public as reached via a web page or social media), or both. Students are encouraged to be creative, and products are by no means limited to uni-directional forms of communication. The communication plan should be *strategic*. It should articulate specific aims that the communication seeks to achieve (for the student as well as for the audience or other interests). The plan should also explain why the proposed format, style, and content of the communication product were chosen to achieve those aims. Reflexivity (discussed further below) is needed to perceive how other parties' motivations, aims, and ways of understanding may differ from one's own, and to conduct the communication plan responsibly in light of those factors. It is recommended that the plan be incorporated into the dissertation prospectus as a dedicated section, but it can also be a stand-alone document. In developing the plan, the student is encouraged to work collaboratively with their ICON rep, advisor, and ideally their intended audience or others with relevant expertise within and outside the ICON community.

Evaluation: The ICON rep will evaluate the communication plan as part of the prospectus defense (or earlier, if preferred by the student). If the rep determines that the plan and/or its rationale do not meet

¹ A product might be a policy brief, a website, podcast, film or other form of communication with non-academic audiences. A process might include a workshop to share findings in socially appropriate medium and explore implications, an interactive artistic project (community theater performance, public art installation, etc.), multistakeholder roundtable, or a facilitated visioning/planning/decision process.

the above expectations, they will work with the student and advisor to guide them in making necessary changes.

Reflexivity

Reflexive thinking considers how our presence, positionality, identities and perspectives can affect others and also influence our own experience and understandings. Practicing reflexivity is a way to increase awareness and responsibility regarding one's positionality, power relationships, disciplinary biases, tacit assumptions and values, and the blind spots this may create. It also needs to be cultivated by reading and partnering outside of one's discipline, questioning one's assumptions, and through proactive efforts to seek alternative understandings of - and understand diverse voices on - the topic of study.

Checkpoint: Reflexivity in dissertation conclusions chapter

Expectations for students: As ICON students plan, conduct, analyze, and document their dissertation research, they are expected to read, cite and proactively engage with ideas and writings outside of their home discipline, including ones that challenge their own assumptions. They should also gain an understanding of the histories of the places where, and topics on which, they conduct research. The understandings they acquire through this reading outside their disciplinary niches should be reflected in the literature they cite, the questions they ask and/or the methodologies they employ. Students are also encouraged to use this understanding to reflect on their own assumptions and knowledge practices, and iteratively improve upon them - with an eye to minimizing any harm that may otherwise be done. This should happen throughout the dissertation process, and ICON reps are expected to encourage the student to engage in reflexivity from an early stage, including during comprehensive exams and/or the drafting of the prospectus. Students are expected to formally document their self-reflections in the final Conclusions chapter of their dissertation. With regards to positionality, power relationships, disciplinary biases, and tacit assumptions and values, students are encouraged to discuss: insights gained from their self-assessments; how that awareness influenced their research process; and implications for the knowledge they generated, research products or potential impacts of their research.

Evaluation: The ICON rep will evaluate the student's portrayal of their reflexivity and its implications for their research based on the Conclusions chapter plus any follow-up in the oral defense. Because the Conclusions chapter can take many forms, students are encouraged to share a draft of the chapter with their ICON rep in advance, so the ICON rep and the student can align their expectations and avoid any surprises.