


**EFFECTS OF POSTTRANSLATIONAL MODIFICATION OF TRANSCRIPTION  
FACTOR GLI-SIMILAR 3 BY SUMOYLATION ON INSULIN TRANSCRIPTION IN  
PANCREATIC  $\beta$  CELLS**

  
Gary Ruth (Nov 20, 2017)

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Thesis Advisor




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Member, Thesis Committee



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Member, Thesis Committee



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Member, Thesis Committee

  
James R. Cox (Nov 20, 2017)

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Member, Thesis Committee



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Collegiate/School Graduate Coordinator

  
Stephen H. Cobb (Nov 27, 2017)

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Dean of the College/School

  
Robert H. Pervine (Nov 28, 2017)

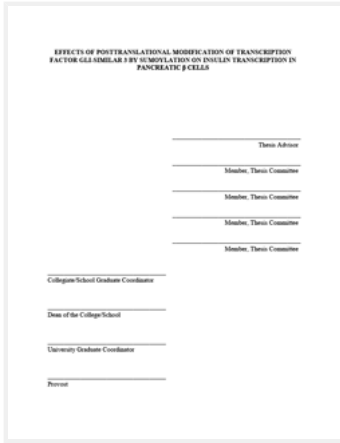
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University Graduate Coordinator

  
Mark Arant (Nov 28, 2017)

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# Thesis Signature Page for Tyler Hoard - MS in Biology

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