

新規精巣ホルモン・インスリン様ペプチド3の測定法開発とその応用



大阪府立大学大学院(獣医繁殖学教室)とMedical University of South Carolina、兵庫県立北部農業技術センター、兵庫県立農業大学、大阪府立食とみどり技術センター他との共同研究

背景・目的

インスリン様ペプチド3 (INSL3) は1993年に発見された精巣のライディヒ細胞から分泌されるホルモン

マウス・ラットで精巣下降や精子形成を促進する役割が示唆

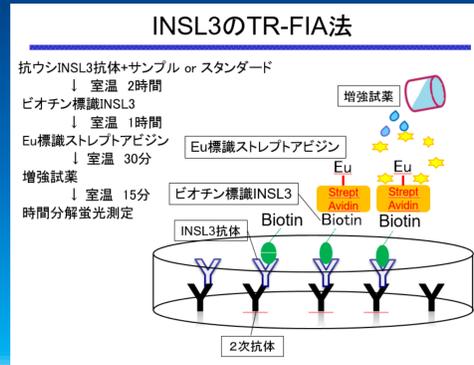
産業動物や伴侶動物ではINSL3の分泌動態や役割は不明

ウシ・ヤギ・イヌ等のINSL3測定法は未開発であった

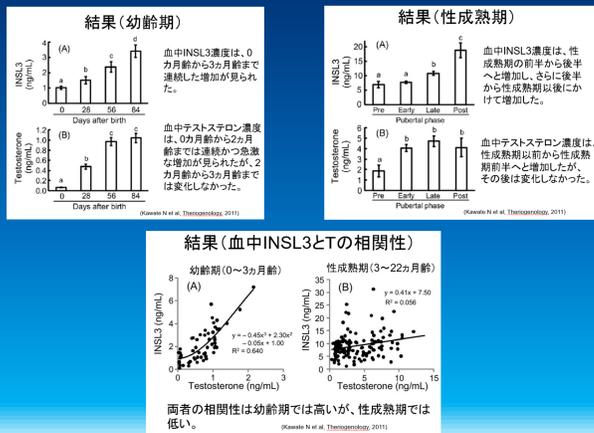
ウシ・ヤギ・イヌのINSL3測定法を開発し、それら動物の血中分泌動態と調節を解明し、精巣機能判定等への応用を検討

INSL3測定法の開発

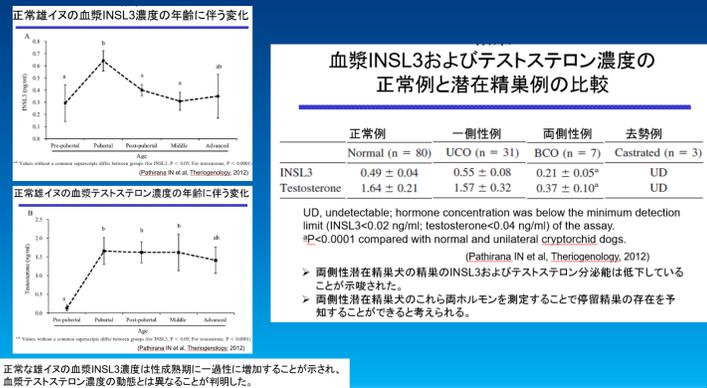
EIA法・TR-FIA法を確立



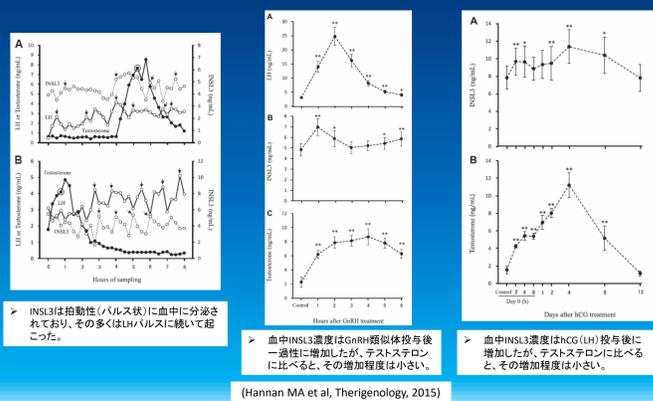
雄ウシの出生から性成熟後までの血中INSL3濃度の変化



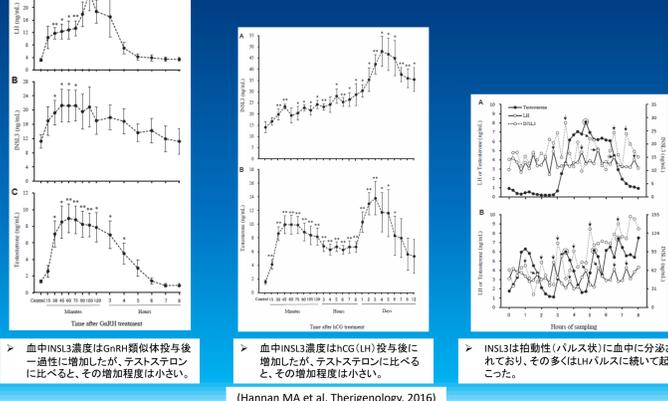
雄イヌの性成熟過程および潜在精巣例の血中INSL3濃度



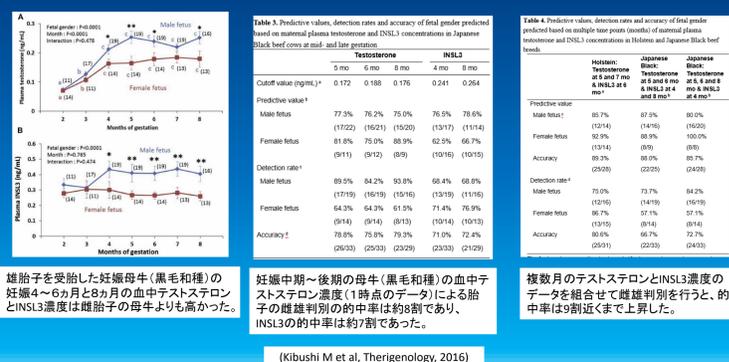
雄ウシの血中INSL3濃度の短時間動態と分泌調節



雄ヤギの血中INSL3濃度の短時間動態と分泌調節



妊娠母牛の血中精巣ホルモン測定による胎子の雌雄判別への応用



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