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شبكة المعلومات الجامعية

# بسم الله الرحمن الرحيم



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# شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم





سامية محمد مصطفى



شبكة المعلومات الجامعية

# جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

## قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها  
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



## يجب أن

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# بعض الوثائق الأصلية تالفة





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# بالرسالة صفحات لم ترد بالأصل



# GASTROINTESTINAL CARCINOID

## ESSAY

*Submitted in partial fulfillment of the  
Requirements for the master Degree*

**(IN GENERAL SURGERY)**

**BY**

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

لَا إِلَهَ إِلَّا اللَّهُ

مُحَمَّدٌ رَسُولُ اللَّهِ

وَاللَّهُ عَالِمُ الْغُيُوبِ

صَدَقَ اللَّهُ

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*To My Family*



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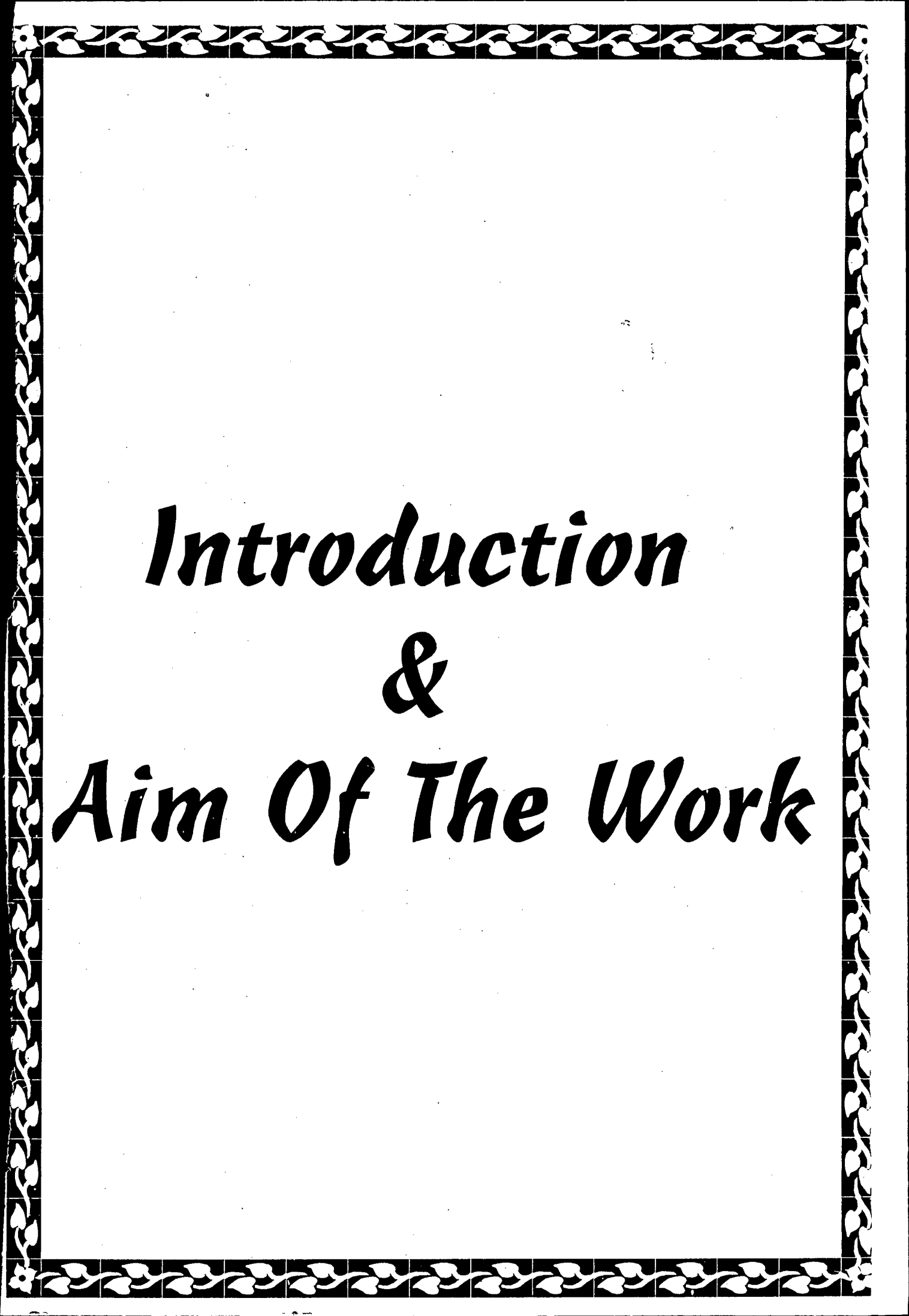
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# ***Introduction & Aim Of The Work***

## Introduction and Aim of the Work

Carcinoid Tumours are rare neoplasms, with an estimated incidence of between 0.7 and 2.0 per 100.000 of the general population. Most reports indicate a slightly higher incidence in females. Malignant carcinoids are 40 % more common in males and benign carcinoids twice as common in females (*Modlin and Sandor 1997*).

The origin of carcinoid neoplasms is the enterochromaffin or Kulchitsky cell of the gastrointestinal tract. These are neuroendocrine cells which originate from the same progeny stem as all the other epithelial cells of the GI tract. They are considered part of the diffuse neuroendocrine system because of their Amine Precursor Uptake and Decarboxylation (APUD) function. Carcinoid tumors are traditionally classified by their embryological site of origin into foregut, midgut and hindgut lesions (*Goede and Winstel, 2003*).

Epidemiological study of 8305 cases showed that 74% occur in the GI tract, tracheobronchial site being the second most common, 25%. The most common sites are distal to the jejunum. The appendix (18.9%) and ileum (15.42%) comprise more than a third of all cases (*Modlin and Sandor 1997*).

*Onaitis et al, 2000*, at a tertiary referral center, characterized 336 gastrointestinal carcinoids and found the most common sites were ileal (50 %), pancreatic (16%), gastric (10 %) and rectal (10%).

**The aim of this study** is to throw light on these tumours, their possible aetiology, pathology, clinical presentation, and the modern trends of their diagnosis and treatment.

## Historic Background Of Carcinoid Tumours

Carcinoid tumours have been described as "The missing link" between benign and malignant tumours. In (1808) Merling first cited the carcinoid as an appendiceal tumour (*Teitelbaum et al., 1972*).

The classical description of the carcinoid tumour is credited to Lubarsch (1888) who showed that the crypts of Lieberkuhn were the site of origin of this lesion (*Ravitch et al., 1980*) Ranson in 1890 described the first metastatic carcinoid in a woman with multiple tumours.

The granular cells in the crypts of Lieberkuhn were identified by Nicholas Kultschitzky in 1897 and now bear his name (*Teitelbaum, et al., 1972*).

The term "*Karzinoide*" in German or "carcinoid" in English was coined by *Oberndorfer in 1907*, reflecting his impression that these tumours were benign and only resembled carcinoma. The history of carcinoid tumours is fascinating and our understanding and conceptualisation of this entity are still unfolding.

*In 1910 Huebschmann* postulated that granular chromaffin cells of the testinal muscosa, which were described by Kultschitzky gave rise to carcinoid tumours. This theory was



further substantiated by the work of Mason and collaborators. *In 1952. Ersparmer and Asero* demonstrated the presence of serotonin in kultschitzky cells, and one year later Lembeck reported the extraction of serotorin from a carcinoid tumour. *Thorson et al. 1954*, related carcinoid tumours to the endocrinologic disorder that we know today as the carcinoid syndrome.

*Ravitch 1980*, noticed the occurrence, throughout the body, of neoplasms associated with a diverse array of endocrinologic abnormalities and physiological similarity to carcinoid tumours of gastro intestinal tract. This gave rise to the concept of an endocrine cell system of propable neural crest origin scattered throughout the body. Most recently, this system has become generally known as the APUD system (amine precursors uptake and decarboxylation) (*Pearse et al., 1974*).