

**WEO research workshop in conjunction with Jakarta International
GI Endoscopy symposium & Live demonstration
1st August '19**

Research in Endoscopy: *Is this for me and how do I start ?*

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Disclosure

Research support, educational grants, consultancy, speaker honoraria:

- Olympus
- Pentax
- Cook
- Boston Scientific
- Covidien
- CDX Diagnostics
- Astra Zeneca



Definition of Research

The systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions.

Oxford Dictionary



Why do we need research?

- High value to the population and society
- Provides important information about disease trends, risk factors, outcomes of interventions
- Informs cost of health care delivery
- Data and sample collection can be used for secondary research in epidemiology, health service, genetics and public health interventions
- Allows Invention and Innovation in health care
- Forms the platform for evidence based medicine

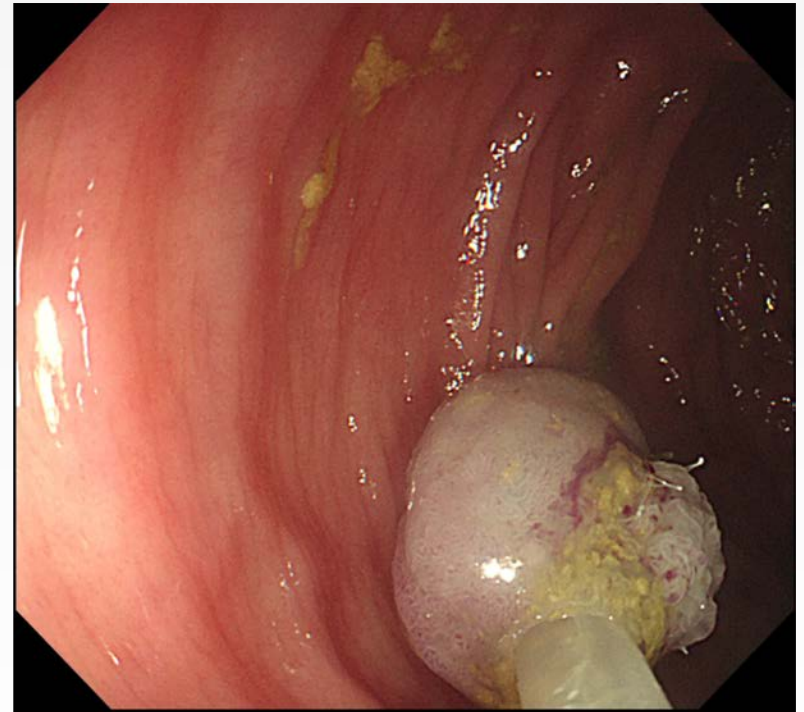
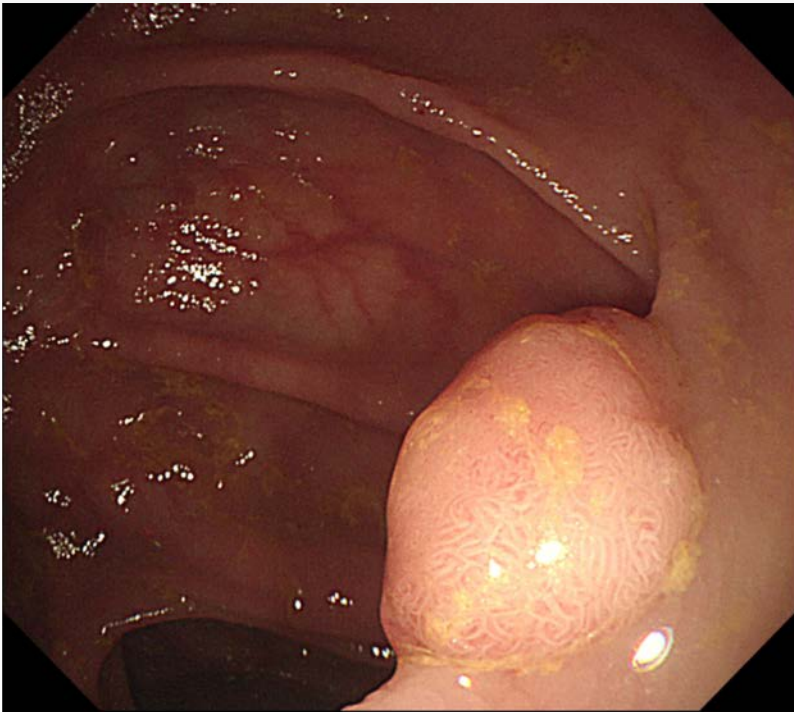




I never predict. I just look out of the window and see what is visible—but not yet seen.

Peter F Drucker 1909-2005

Colon polyp



The New England Journal of Medicine

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PREVENTION OF COLORECTAL CANCER BY COLONOSCOPIC POLYPECTOMY

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Bowel Cancer Screening Programme

For further information:

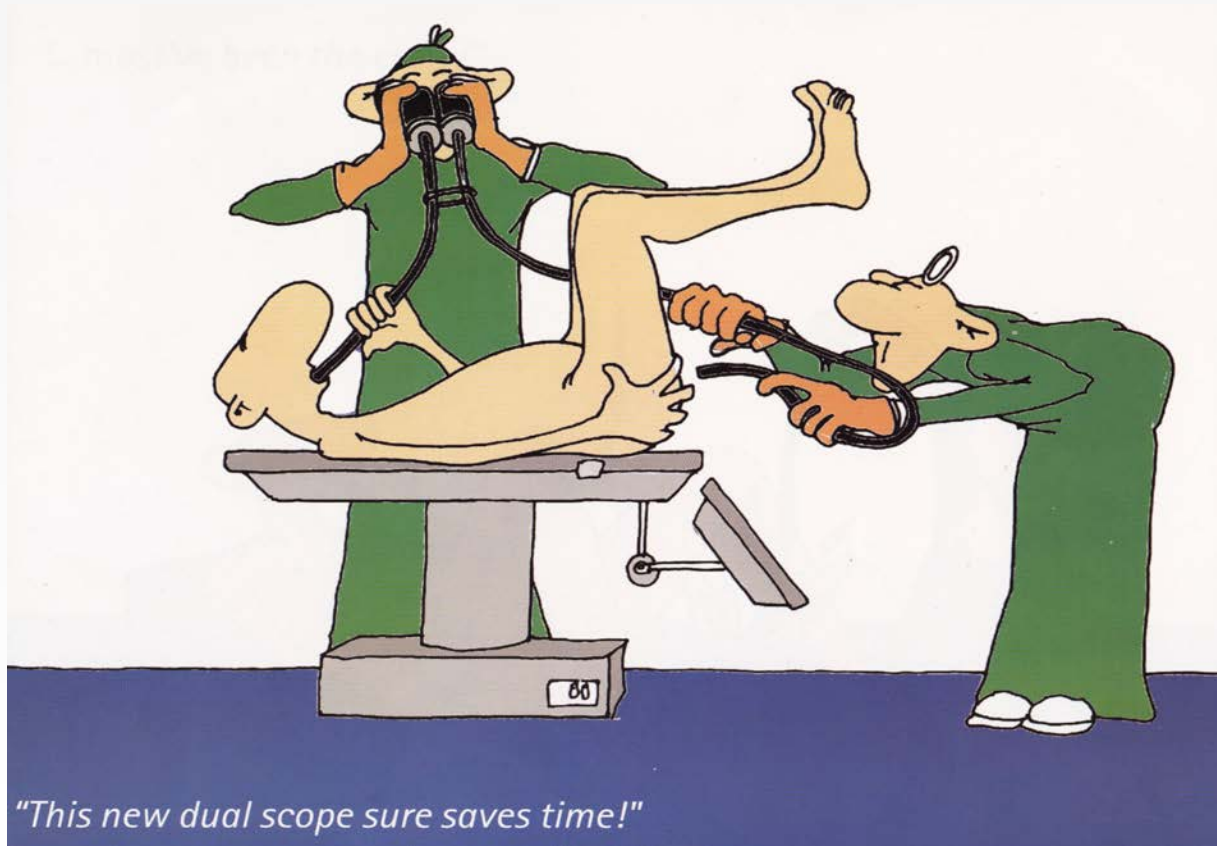
Freephone: 0800 707 60 60

Website: www.cancerscreening.nhs.uk





Inventions & Innovations



Invention can be defined as the creation of a product or introduction of a process for the first time.

Innovation, on the other hand, occurs if someone improves on or makes a significant contribution to an existing product, process or service.



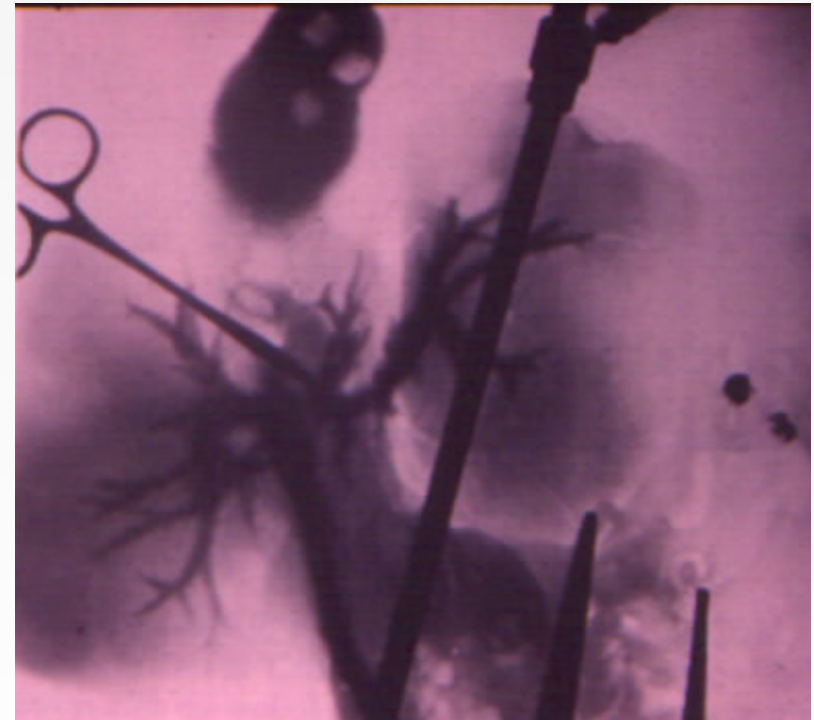
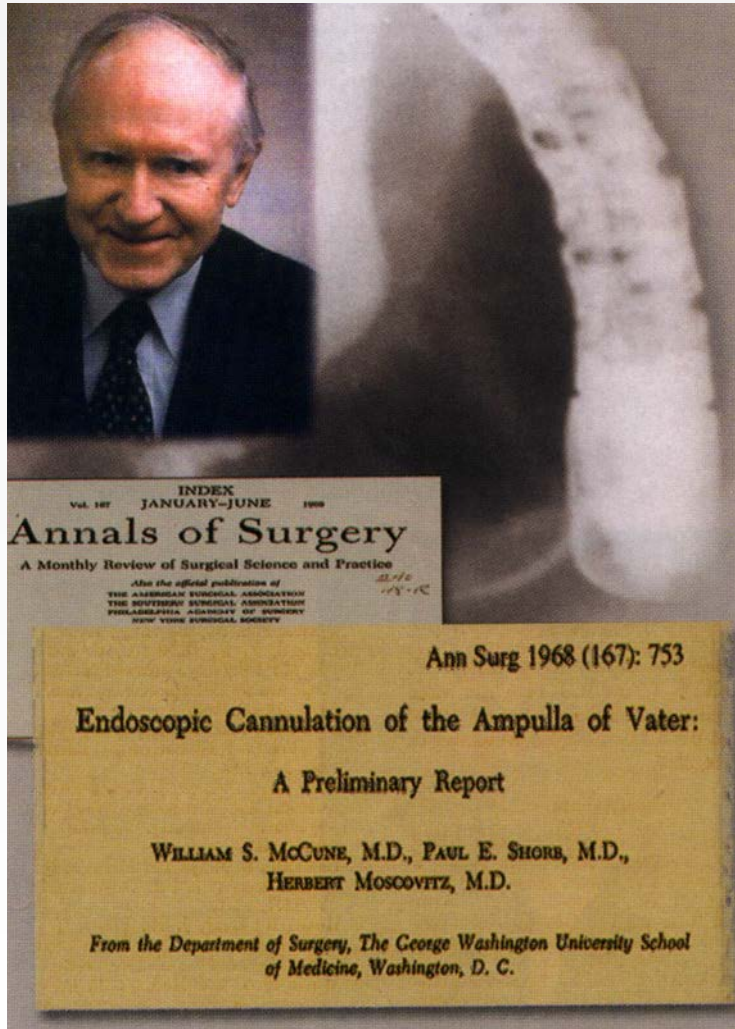
First Fibreoptic endoscopy



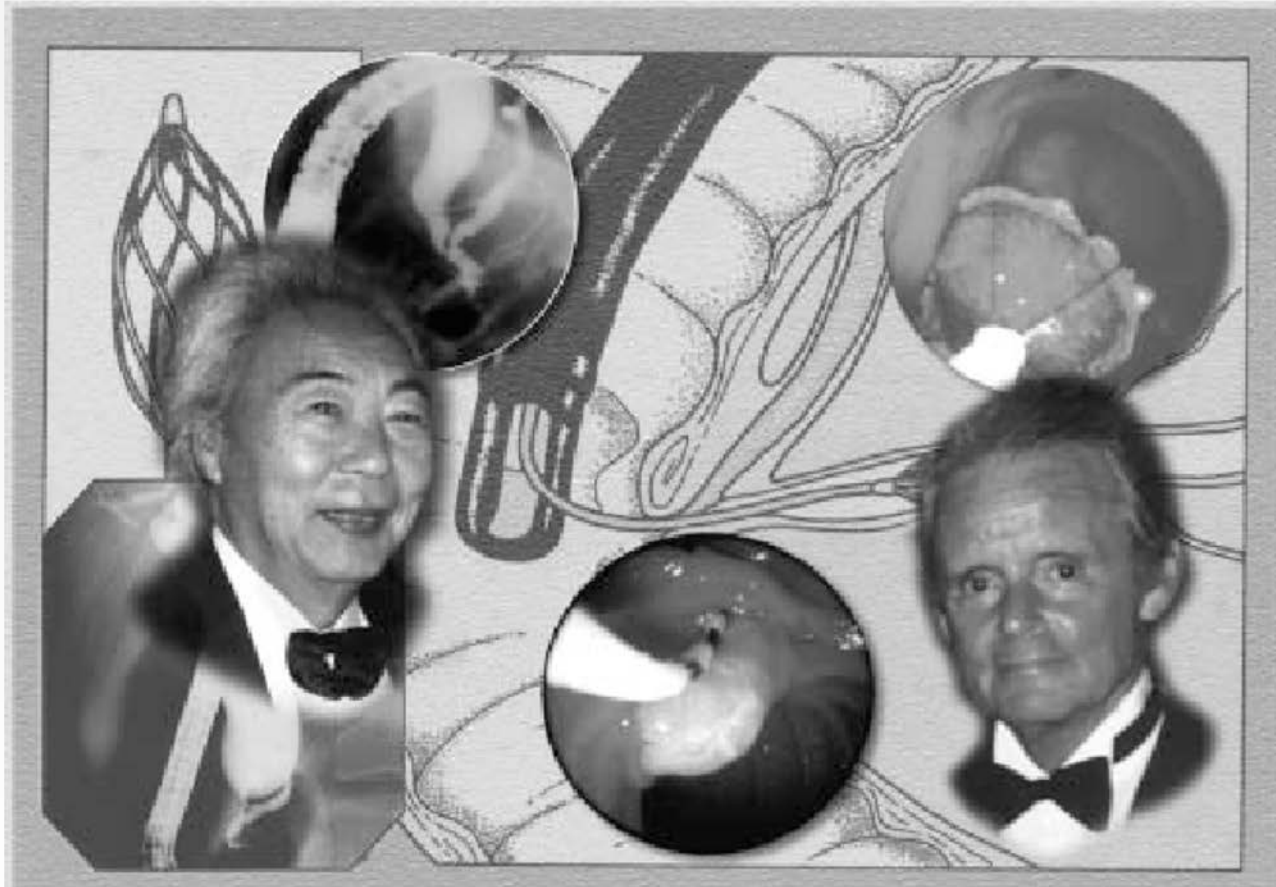
Basil Hirschowitz 1960



First ERCP 1968



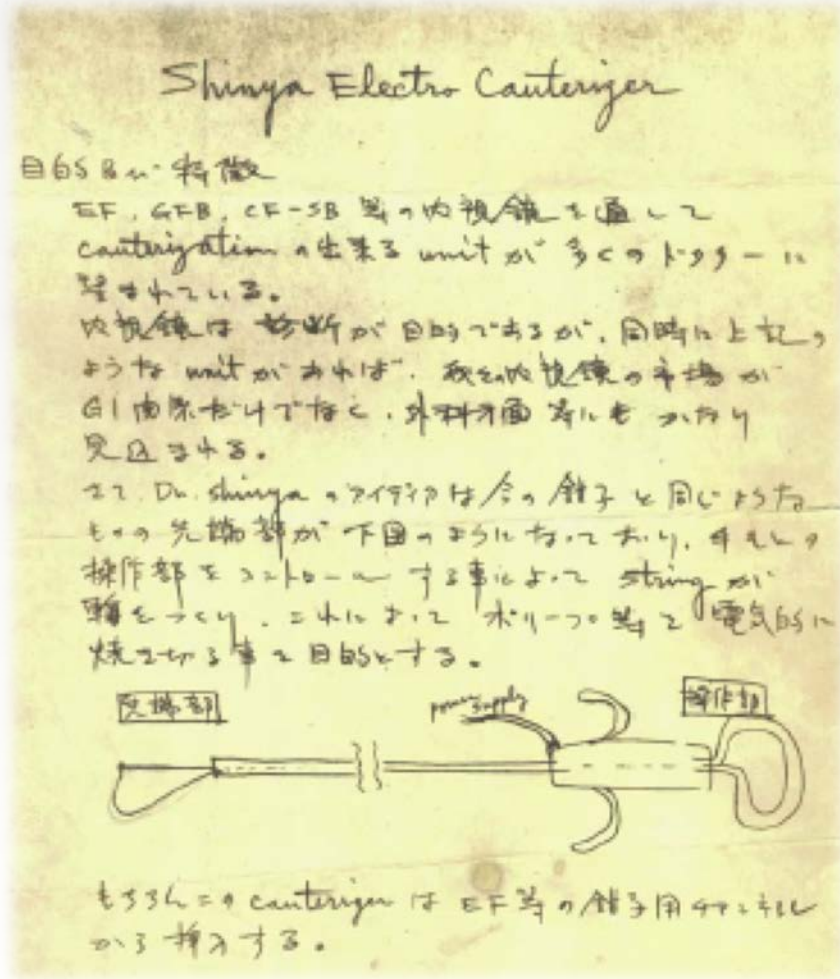
Endoscopic sphincterotomy 1973



K. Kawai, Y. Akasaka, et al
Gastrointest Endosc 1974; 20: 148-151

M. Classen, L. Demling
Dtsch med Wschr 1974; 99: 496-497

Sketch of the 1st polypectomy snare design, New York, Jan'69



Hiromi Shinya & Hiroshi Ischikawa,
Beth Israel Hospital, New York. 1969

Colonoscopic Polypectomy with Local Injection of Methylene Blue

AKIHIRO MUNAKATA and YOSHIHARU UNO

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MUNAKATA, A. and UNO, Y. *Colonoscopic Polypectomy with Local Injection of Methylene Blue.* Tohoku J. Exp. Med., 1994, 173 (4), 377-382 — For safer and complete colonoscopic polypectomy of large broad-based adenomas, we attempted submucosal injection of methylene blue before electrosurgical snare excision. Twenty-five large broad-based sessile adenomas 20 mm or more in diameter were resected. Methylene blue was injected about 2 mm away from the edge of the lesion. After injection, the lesion appearing as a blue bleb was resected by snare polypectomy. All the lesions were completely resected by single-step polypectomy. During and after polypectomy, no complication occurred. Endoscopic resection of large sessile adenomas with the aid of submucosal injection of methylene blue thus appears to be safe and effective. ——— large broad-based adenoma; colonoscopic polypectomy



EMR

Endoscopic polypectomy of colonic adenomas is a common procedure and is widely accepted throughout the world (Shinya 1982). However, there are still some problems to be solved, including incomplete resection, and perforation (Habr-Gama and Wayne 1989). In particular, for large broad-based sessile lesions, excision by conventional polypectomy carries a relatively high risk of colonic perforation (Hunt 1983). This is because polypectomy of these lesions requires a higher degree of thermal coagulation than for pedunculated lesions. Incomplete resection is also more likely to occur in broad-based lesions (Christie 1977), since the lesion boundary is difficult to identify, and snare removal of the lesion is extremely difficult.

Previously, we have reported a methylene blue injection method that facilitates endoscopic resection of colonic submucosal tumors (Uno et al. 1992), and also the endoscopic removal of the largest semipedunculated lipoma reported hitherto in the world (Uno et al. 1993). In this article, we report our results for the methylene blue injection method in a series of large broad-based adenomas.

Received May 6, 1994; revision accepted for publication June 30, 1994.

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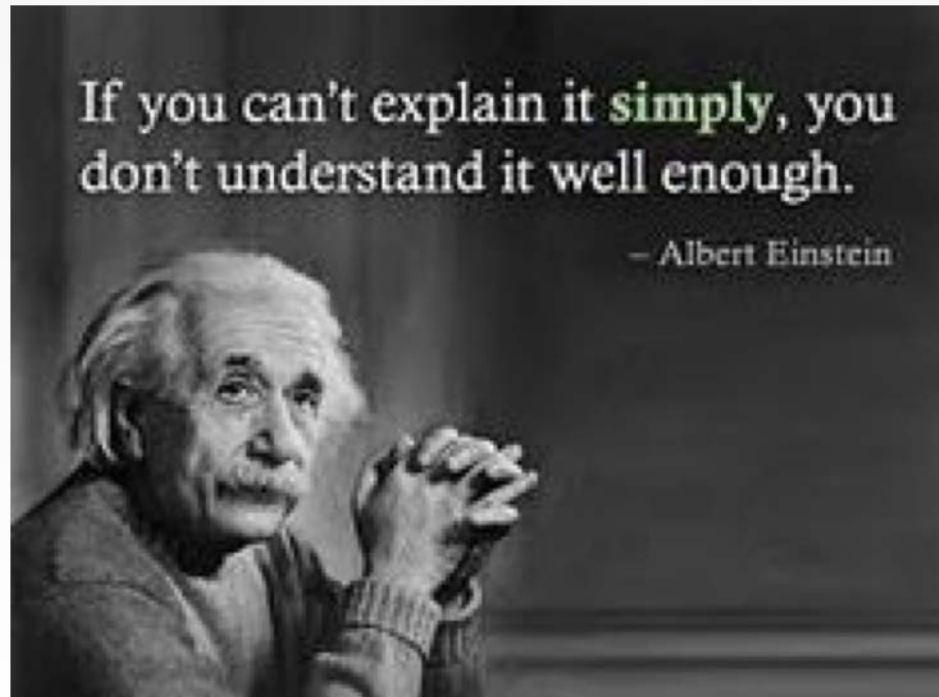
Invention & Innovation



**If you have a question:
there it is..you have research to do!**



Start small and keep it simple



Write down what you are aiming to do: *it becomes a protocol* !



Setting Research Priority



Patient centered

Key things to consider

Feasibility & Funding



IRB & Ethics approval

The **Declaration of Helsinki** (DoH) is a set of ethics regarding human experimentation developed for the medical community by the World Medical Association (WMA). It is widely regarded as the cornerstone document on human research ethics.

JAMA. 2013;310(20):2191-2194.

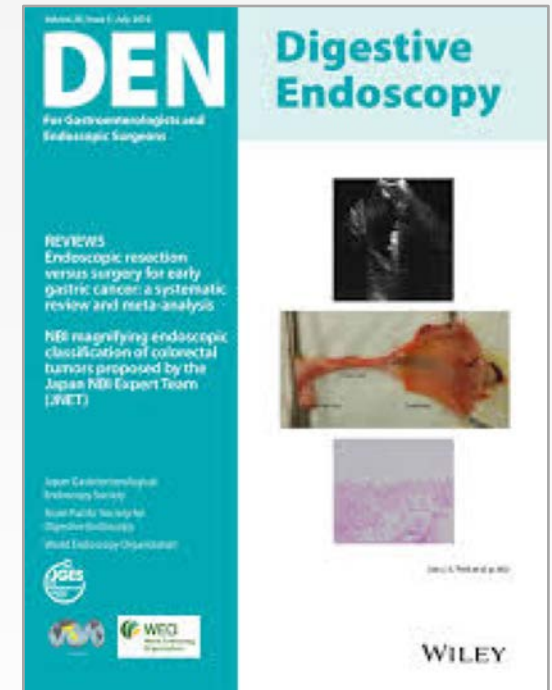
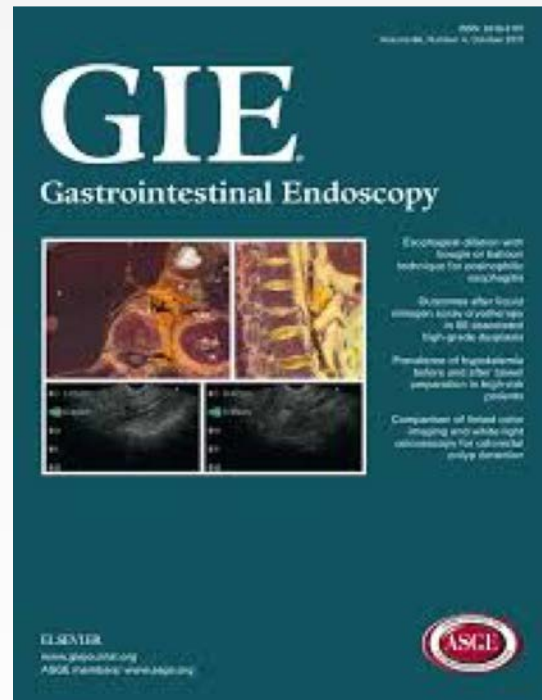


Who to involve?

- Colleagues and cross specialty
- Patients and focus groups
- Biostatistician
- Funding agencies / Charity
- IRB / ethics committee



Publication





Sam Ogden

Publish houses of brick, not mansions of straw

Papers need to include fewer claims and more proof to make the scientific literature more reliable, warns [William G. Kaelin Jr.](#)

23 May 2017



PDF



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I worry about sloppiness in biomedical research: too many published results are true only under narrow conditions, or cannot be reproduced at all. The causes are diverse, but what I see as the biggest culprit is hardly discussed. Like the proverbial boiled frog that failed to leap from a slowly warming pot of water, biomedical researchers are stuck in a system in which the amount of data and number of claims in individual papers has gradually risen over decades. Moreover, the goal of a paper seems to have shifted from validating specific conclusions to making the broadest possible assertions. The danger is that papers are increasingly like grand mansions of straw, rather than sturdy houses of brick.



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nature neuroscience



Summary

- Research is for every clinician
- We owe it to our patients
- Start small and keep it simple
- Know your research priorities
- Work in a team / Ethics / IRB
- Publish your results



THANK YOU

March 7-10, 2020
Rio de Janeiro, Brazil

 **ENDO 2020**
The future in focus
2nd World Congress of GI Endoscopy

Save the date! January 2019: pre-registration opens
March 2019: 1st call for abstracts

For more information,
please visit:
www.endo2020.org



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